

Nasdaq Calypso Bloomberg TS Integration Guide

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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.
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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.
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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.



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



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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
- dhbcore.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:	Configuration attributes		
Upload Import Message Engine - Bloomberg		STARTUP		
	421010	TIMEOUT_RESTART		
Engine Class:		USE_BOOK_PRICING_ENV		
com.calypso.tk.engine.UploadImportMessag	eEngine	VALUATION TIMES		
Display Name: 📀 🛛 🔤	pplication Type:	VALUATION_TIMEZONES		
Upload Import Message Engine - Bloombe E	ngineServer	_		
Description:		VERSION_CHECK		
Upload Import Message Engine - Bloom	perg AIM	XFER_CHECK_FIRST		
	0	XFER_NEVER_BV		
Persisted Event Configuration:		XFER_NEXT_EVENT		
PSEventAccountBilling	· • • •	XFER_PAST_GENERATION		
PSEventUpload	·	XFER_POS_AGGREGATION_NAME		
		XFER_USE_AUTOMATIC_ACCOUNT		
	-	XFER_USE_MONEYDIFF		
Event Filters:		XFER_USE_POS_AGGREGATION_ONLY		
AllTransfersKnownEventFilter	• • • •	XFER_USE_REVERSE		
	_	config	BloombergAIM	
		tcid		-
	· ·			Cancel Save
Engine Manager Configuration: S	tart on Startup:			
engineserver 🔻				

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:
UpdateManagerEngine	421012
Engine Class:	
com.calypso.tk.engine.UpdateManagerEn	gine
Display Name: 🛛	Application Type:
Update Manager Engine	EngineServer
Description:	
Update Manager Engine	
Persisted Event Configuration:	
PSEventAccountBilling	•
PSEventMessage	*
PSEventRepublish PSEventTrade	
PSEventUploadReprocess	-
Event Filters:	
AllTransfersKnownEventFilter	•
UpdateManagerEngineEventFilter	
	-
Engine Manager Configuration:	Start on Startup:
engineserver 🔻	A

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.

Short Name	CALYPSO			Status	Enabled	•
Full Name	CALYPSO			Role(s)	CounterParty	
Parent	:				ProcessingOrg	
Country	NONE		•]			
nactive As From		User	calypso_user			
Holi	Legal En Processing Or	·	0		Role ALL	•
	Attribute Ty	-	NTING	• \	alue	
		Processing Org	Legal Entity	Role	Attribute Type	Attribute Value
	Id I			ALL	BB_ACCOUNT_SHORT_NAM	E BB_CALYPSO

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.



Edit User Env		x
Name	Value	
	▶ false	
	b .	
	►	
AUTO_FEED_INTERNAL_REF	▶ false	
AUTO_LOGOUT_TIMEOUT	Þ	1
AdditionalTraceOnExceedDBConnection	ConnectionPool	
	•	1
	▶ true	1
	▶ false	1
BLOOMBERG_DUMMY_BOOK	BLOOMBERG_BOOK	1
	BLOOMBERG_CPTY	
	▶ BLOOMBERG	1
	C:\tools\blp\bbdl\des.exe	1
BLOOMBERG_ENCRYPT_KEY	▶ hGnon[F,	1
BLOOMBERG_FIRMNAME	► Calypso	1
	∑l▶ true	1
BLOOMBERG_FTP_HOST	bfmrr.bloomberg.com]
	▶ }BLHrzsn	1
BLOOMBERG_FTP_USER	▶ dl904	٦,

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.

🧳 Trade Bond Wind	dow -PO is Tokyo Star Bank (0) - Ve
Trade Back Office	e Bond Cashflows Analytics
Trade Details Ca	shflows Fees
Trader	YAIZAWA2 🗸
Sales	BondlSales2 🔹
MarketPlace	NONE

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.

🧳 Trade Bond Wind	dow -PO is Tokyo Star Bank (0) - Ve
Trade Back Office	e Bond Cashflows Analytics
Trade Details Ca	shflows Fees
Trader	YAIZAWA2 🗸
Sales	BondlSales2 🔹 🛄
MarketPlace	NONE

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.

Z Book Hierarchy (Bloomberg	.TS) (User: calypso_user)	
Node Update Criterion NONE v Add All Value	Bloomberg.TS JGB_CPN Bond Future G_FUT_PROP G_FUT_PROP BB_TRADER_PORTFOLIO.JGB_FRN BB_PRODUCT_GROUP.Bond BB_PRODUCT_GROUP.Future BB_PRODUCT_GROUP.Future BB_PRODUCT_GROUP.Future BB_PRODUCT_GROUP.IRD G_FUT_PROP BB_PRODUCT_GROUP.IRD G_RD_PROP_NB BB_TRADER_PORTFOLIO.MUNI_JPY	Up Down

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

iew Help									
Book Id	29949		Att	tributes					
Name	TRADINGC		Na	me		Value			
	a construction		AC	CT_TYPE					
Activity	ACTIVITY			AdjustmentDays					
Accounting Link	TRADING			DateRule		7			
recounting child				ReversalRule		r			
Legal Entity	CALYPSO			TRADER_PORTFOLIO)	B_TRADINGC			
				okBundle					
Location	Asia/Hong_Kong			MoneyDiff Book					
				E_ACCOUNT					
End Of Day 23 Hour 59 Min			F_ID C Compounding						
Base Ccy	LIED					7			
base ccy	030			C Consolidator		v			
Holidavs				C Offset					
,-				C Role		7			
Comment									
Id / Name		Legal Entit	y	Location	Base Curren	y End Of D			
27865 BookCMF_6		CMF_1		America/New_York	USD				
27866 BookCMF_5		CMF_1		America/New_York	USD				
27872 BookCMF_7		CMF_1		America/New_York	USD				
27873 BookCMF_8		CMF_1		America/New_York	USD				
27939 EM004		PO		Asia/Hong_Kong	USD				
29949 TRADINGC				Asia/Hong_Kong			-		
34964 Book PO4SV		PO4SWAP		Asia/Hong Kong	lusn				
						•			

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.





Name	Value	
	▶ false	
AUTOLOGIN_APPLICATIONS	>	
AUTO_FEED_EXTERNAL_REF	>	
AUTO_FEED_INTERNAL_REF	▶ false	
AUTO_LOGOUT_TIMEOUT	>	
AdditionalTraceOnExceedDBConnection	ConnectionPool	
BIND_TO_SPECIFIC_INTERFACE	>	l
BLOOMBERG_CALL_PUT_SCHEDULE	► true	
BLOOMBERG_CREATE_ISSUER	▶ false	
BLOOMBERG_DUMMY_BOOK	BLOOMBERG_BOOK	
	BLOOMBERG_CPTY	
BLOOMBERG_DUMMY_ISSUER	▶ BLOOMBERG	
	C:\tools\blp\bbdl\des.exe	
	▶ hGnon[F,	
BLOOMBERG_FIRMNAME	► Calypso	
	-	
BLOOMBERG_FTP_HOST	▶ bfmrr.bloomberg.com	
BLOOMBERG_FTP_PASSWORD	► }BLHrzsn	
BLOOMBERG_FTP_USER	▶ dI904	

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:

🛃 WorkFlow Action			
Id 62720		Action	REPROCESS
Orig Status PENDING		Result Status	REPROCESSING
Event Class PSEventMessage		Subtype	GATEWAYMSG
Product ALL		Processing Org	ALL
🔲 Different User	🗖 Create Task	🔽 Use STP	☑ Use KickOff/Cut Off
Log Completed	Preferred Action	🔲 Update Only	🔲 Generate Intermediary E
🔲 Needs man. Auth.			2 Priority
Rules CheckKickOff,Requ	uestBloomberg,UploadReproces	s	Help
Filter		Custom R	ules Definition
Audit Filter	Y		T

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



KickOff / CutOff [143005/gfs_143005_iw/calypso_user]	
Q- Multi Filter (Ctrl+F)	Edit Browse
Workflows PSEventMessage PoAL Product:ALL Subtype:CONFIRM Subtype:PAVMENTMSG Subtype:PAVMENTMSG Subtype:RCEIPTMSG Subtype:RCEIPTMSG Subtype:SWIFTCONFIRM BrTradeBundle	Workflow ALL/PSEventMessage/GATEWAYMSG/ALL/PENDING/REPROCESSING Receiver Method ALL Currency ANY Date Calculator Uploader SD Filter HH MM Date Roll NO_CHANGE Kickoff Days Lag 0 Kickoff Time 1 Holidays IF No Cutoff No Cutoff Image: State St
	TimeZone CST Check Holday Scan Frequency Absolute Time New Delete Save SaveAsNew

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

Account Name	CL0009			Custo	dy		
Processing Org	SETCLEAR	~	Ccy AUTO 🗸	Id 78260			
Туре	SETTLE V	SubType Clearing	~	Auto/Template Acc	××		
External Name	Client 3 STD EN	Q	Interface Rule	Aggregate v	Кеу	Value	
					AccountName		
Description	Client 3 STD D				AccountType	T	
					Bloomberg.TS_ClientAccount	3046	
Legal Entity (F2)	CLIENT 3 STD		Role Clier	nt v	Bloomberg.TS_CounterPartyAccount		
Creation Date	22/01/19 13:57:09	Create by Acc Eng	ine only	ulti-Owner	CFTCAccountNumber	CL0009_CFTC	
Creatorroate	22/01/15 15:57:05	of create by Acc city	and only		CFTCNetGrossReportingFlag	 Gross 	
Closing Account			Last Closing Date		CFTCSubAccount		
					CMEEX_ClientAccount	BA	
Parent Account			Parent Id	0	CMEEX_CounterPartyAccount		
External Settl.			External Cash Ac	count			

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/Tr	ranslator							
Ir	nterface Value:	ClientAccountPC	Attribute							
	Calypso Value:	ErrorAccount								
Legal Entit	y Attributes Window -	Version - 0						-		×
Q- Search]							
Legal Entity	SETCLEAR		€	Role ALL	~	Processing C	Org ALL		~	
Attribute Group		~	Attrib	ute Type ErrorAccount	~	➔ Val	lue ERROR_AC	СТ		€
Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	۵t	ttribute Value			_
226257			ALL		ErrorAccount		ROR_ACCT			ĉ
				Authorizatio	on 🐺 Load	🔣 Delete	Save	Show Pending) Authoriza	

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 Enti	ty Attributes Window -	Version - 3							_		×
Q Search											
Legal Entity	SETCLEAR		€	Role	ALL	~	Processir	ng Org ALL		~	
Attribute Group	0	~	• € A	Attribute Type	ClientErrorAccou	int v	€	Value ERROR_A	ССТ		€
Id	Processing Org	Legal Entity	Role	Attribute	Group	Attribute Type		Attribute Value			
70257	ALL	SETCLEAR	ALL			ClientErrorAccount		ERROR_ACCT			
					Authorization	Fi Load	📷 Delete	📕 Save	Show Pendin	g Authoriz	ations

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:

	eports Process Help ttributes Interests Limits C	onsolidation Trans	ation/Revaluation	Legal Entities Clearing Brow	se		
Account Name	Newedge Client			Cus	tody		
Processing Org	SETCLEAR	~ (Ccy AUTO \checkmark	Id 70270			
Туре	SETTLE V SubT	ype Clearing	~	Auto/Template Acc	××		
External Name	Newedge Client1	Q	Interface Rule	Aggregate	, Key	Value	-
External Name	Newedge clienci	(2)	Interface Rule	Aggregate	AccountName		1
Description	Newedge Client2				AccountType		
			_		Bloomberg.TS_ClientAccount		
Legal Entity (F2)	NEWEDGE		Role Co	ounterParty	Bloomberg.TS_CounterPartyAccount	TOBYC	
Constitute Data	29/11/18 06:05:53	Create by Acc Engi		Multi-Owner	CFTCAccountNumber		
Creation Date	29/11/10 00:05:55	J Create by ACC Engl	ine only		CFTCNetGrossReportingFlag		
Closing Account			Last Closing Date		CFTCSubAccount		
			cost closing bate		CMEEX_ClientAccount		
Parent Account			Parent Id	0	CMEEX_CounterPartyAccount	4Q0B	
External Settl.			External Cash /	Account			
Balance							
Status	Active \checkmark			Retroactiv			
Active From				Interest Bearing	Billing Is Proprietary		
				Proprietary Accou	int		
Active To							
by Trade Date				Sub-Account Ty	pe 🗸 🗸		

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 Enti	ty Attributes Window -	Version - 3					-		×
Q,- Search]						
Legal Entit	SETCLEAR		€	Role ALL	~	Processing Org	ALL	~	
Attribute Group		~	Attrib	ute Type CounterPartyEr	rorAccount v	Value	Newedge House		€
Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attri	oute Value		
185757			ALL		CounterPartyErrorAc		dge House		t t
				Authorization	n 🛐 Load	Delete	Save Show Pend	ng Authoriza	ations

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:

🦽 Lega	al Entity At	tribut	tes Window	- Versio	on - 1		-	×
Le	gal Entity	BANK	ALPHA		Role ALL	\sim		
Proces	sing Org	ALL		~				
Attrib	oute Type	Client	Execution Boo	k ∼	Value BA ClientExecutionBoo	k		
Id	Processing	Org	Legal Entity	Role	Attribute Type	Attribute Value	 	
65260	ALL			ALL	CETCID			
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		
30004	ALL		DAINK ALFRA	ALL	chenterrorAccount	ENNOR_ACCI		
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		
Load	d De	elete	Save		Authorization	Close		

- 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>).

Contract BOND FUTURE 000	1/NYSE/USD/Bond -		From Date 11/01/2013	Show Futures	🛃 Save Futures 🗖 S	ave Curve Underlvi	nas 💥 Delete Fu	ture
ame	Value	_	BB_TICKER_EXCHANGE	Futures Existing	Curve Underlying Existing	Expiration Date	Last Trade Date	First Delivery I
Contract Summary			ESU2 NYSE			18/03/2013	18/03/2013	04/03/2013
Exchange	NYSE	- Â				17/06/2013	17/06/2013	03/06/2013
Currency	USD	Ξ				16/09/2013	16/09/2013	02/09/2013
Name	AIM BOND FUTURE 0001					16/12/2013	16/12/2013	02/12/2013
Туре	Bond	-				17/03/2014	17/03/2014	03/03/2014
anda in a su				m	(m)	16/06/2014	16/06/2014	02/06/2014
etails Underlying						15/09/2014	15/09/2014	01/09/2014
ame	Value					15/12/2014	15/12/2014	01/12/2014
General						16/03/2015	16/03/2015	02/03/2015
Ouote Type	Future	Ē				15/06/2015	15/06/2015	01/06/2015
Ouote Decimals	6	=				14/09/2015	14/09/2015	07/09/2015
Is Contract Size Variable		- 11				14/12/2015	14/12/2015	07/12/2015
Contract Size	100.000.000.000000	- 11				14/03/2016	14/03/2016	07/03/2016
No. of Futures in Contract	20	- 1				13/06/2016	13/06/2016	06/06/2016
Settle Type	Cash	-				19/09/2016	19/09/2016	05/09/2016
occor ()pc		T			[FT]	19/12/2016	19/12/2016	05/12/2016

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

rade Back Office Future	Analytics Pricing Env Market Data Utilities Help	
Trade Details Fees		
Cpty CALYPSO	CounterParty Status PENDING	G ID 🔻 71465
Book TRADINGC	Broker Remove Te	emplate NONE -
Exch LSE 💌	Ccy GBP Contract AIM BOND FUTURE	▼ Future Dec 12 ▼
Exch LSE		▼ Future Dec 12 ▼
Id Type BB_MARKET		Future Dec 12 Show
Id Type BB_MARKET Future FutureBond/AIM E	ND FUTURE 0004/03/12/2012	
Id Type BB_MARKET Future FutureBond/AIM E	Value	
Id Type BB_MARKET Future FutureBond/AIM E	ND FUTURE 0004/03/12/2012	

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.EQUITY.DEMO20120710 (User: calypso_	user)	l	
<u>File H</u> elp			
📑 📴 🖬 📑 🌌 🗙 🥹			
Name EQUITY.DEMO20120710		Product Id	9967
Security Code BB_MARKET_SECTOR			Search
Definition CA Dividend Legal Entities Au	dit		🖉 Custom Data
Equity			*
Corporate	DEMO CORPORATE 2	0120710	
Equity Type	Standard		
Currency	USD		
BB_CALC_TYP			E
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.

Z Equity:EATING PEANUTS -PO is CALYPSO (5465) - 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 V Status PENDING ID V 5465
Broker Template NONE
Trade Entry Buy Viname Equity.EATING PEANUTS Gassification
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>).



File Futures Help							
Contract / INDEX 0001/HKE	X/HKD/EquityIndex 👻 📑 Ne	w	From Date 11/01/2013	Show Futures	📕 Save Futures 🛃 S	ave Curve Underlyii	ngs
Name	Value		BB_TICKER_EXCHANGE	Futures Existing	Curve Underlying Existing	Expiration Date	Last Trade Da
Contract Summary			HSI HKEX			15/01/2013	15/01/2013
Exchange	HKEX					19/02/2013	19/02/2013
Currency	HKD	E				19/03/2013	19/03/2013
Name	AIM EQUITY INDEX 0001					16/04/2013	16/04/2013
Туре	EquityIndex	-				14/05/2013	14/05/2013
Quote Type Quote Decimals Is Contract Size Variable	Price32	=					
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	Fived	T					

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

rade	Back Office Euture	Analytics Pricing En	v Market Data	Utilities Help	
Turc		Analysics Thengen	i mance bata	ounces thep	
Trade	Details Fees				
Cpty	CALYPSO	c	ounterParty	Status PENDING	G ID 🔻 25965
Book	TRADINGC	✓ Broker		Remove Te	mplate NONE -
Cont	ract Selection				
	Exch HKEX 👻	Ccy HKD 🔻	Contract AIM	EQUITY INDEX	▼ Future Sep 12 ▼
				-	
	r				
Id.	Type BB_MARKET	Value			
Id.	Type BB_MARKET •	Value			
		/AIM EQUITY INDEX 000 1/	18/09/2012		Show -
	iture FutureEquityIndex		18/09/2012		Show -
Fu	iture FutureEquityIndex				Show -
Fu	uture FutureEquityIndex	AIM EQUITY INDEX 000 1/	Price32		Show •

2.4.4 FX Forward

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



🚽 Buy or Sell				Trade I	(d: <u>100465</u>	Status:	PENDING		1	0:05:45	<u> </u>
Deliverable	Туре		Buy/Sell		Ccy Pair		Book			Counter	party
Deliverable	Outright		Buy		USD/AED		TRADINGC			CALYPSO	•
Ccy AED Amount 1	-559.13	Date	12/09/2012 S	pot	1.2262	Margin		0.00	\$	USD	AED
Amount 2	456.00		P	oints	-0.37	Final		1.226163	Near	0.00000	-0.029
										USD	AED
			т	rader	1.226163				Near	456.00	-559.
Comments	Ç Fina	al Margin:		0.00 Del	ivery Unknown	Non-Strip	Option?	Limit	ts S/	AVE(F5)	NEW(F6)
💢 Back to Back 🛛 💢 Curr	ency Split 🛛 💢 Spot R	lisk Transfer	× Fw	d Risk Transf	er Details			Keyword	s		
Default	User C	Override			Trade Date		08/2012	Q- Filte	r Keywoi	rds	
Split Currency	▲ Bas	se Split Book			Alternate Settle		09/2012	Strate	eqy		
Primary Book	Qu	oting Split Bo	ok		Far leg Alterna	te		Broke	r		
Quoting Book	T				Trader			CLS		false	
					Mirror Trader			CLS_E	LIGIBLE		
Previewed Trades Actual Trades	;				Sales	JLO	Y12	SPOT	MARGI	N	
					Broker			LateT	radeDat		
Routed Trades Positions					Role		InterParty	LateT	radeDat		
Book Currency Pair Prin	nary Quoting ID	Type	Mirror Book	Counterpa	Action		AMEND	Report	tingCcy.		
TRADINGC USD/AED 456		Originating		CALYPSO	Internal Ref. External Ref.		TOMS_41	LIMIT	_BREAC		
TRADINGC 03D/ALD 430	.00 (333.13) 100403	onginaung		CALIFOO	Bundle Type	BB_	TOMS_41	LIMIT	_VIOLAT	F	
					Bundle Type Bundle Name			Sales	82B		
					CLS				B2BFrom		
					Prime Broker				B2BTo		
					Prime broker			Saved	dSalesB2		
Mr Routing 🛛 Reporting Curr	oncy Split Data							Save	dTransfe	r	
Roduing Curr	ency spin Rate										

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>).

Contract AIM FX EUR/USD/	EURONEXT/EUR/FX 👻 📑 Nei	N	From Date 14/01/2013	Show Futures	📕 Save Futures 🗖 S	ave Curve Underlyi	ings
Name	Value	_	BB TICKER EXCHANGE	Futures Existing	Curve Underlying Existing	Expiration Date	La
Contract Summary			EUR EURONEXT			18/03/2013	18
Exchange	EURONEXT					17/06/2013	17
Currency	EUR	=				16/09/2013	16
Name	AIM FX EUR/USD					16/12/2013	16
Туре	FX	-				17/03/2014	17
						16/06/2014	16
Details Underlying						15/09/2014	15
Name	Value					15/12/2014	15
	Value	_				16/03/2015	16
General						15/06/2015	15
Quote Type	Future	_				14/09/2015	14
Quote Decimals	6	- 11				14/12/2015	14
Is Contract Size Variable		E				14/03/2016	14
Contract Size	100,000,000.000000	-				13/06/2016	13
No. of Futures in Contract	20	- 11				19/09/2016	19
Settle Type	Cash	- 11				19/12/2016	19
Negative Price Liquidation		_				13/03/2017	13
Attributes	Select	_				19/06/2017	19
Fungible with		_				18/09/2017	18
Future Name Month	Expiry Date	- 1				18/12/2017	18
Last CCP Date Lag	0	_					
Ticks		_					
Tick Type	Fixed	_					
Tick Size	200	-					

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



rade Back Office Future	Analytics Pricing Env	Market Data Ut	tilities Help		
Trade Details Fees					
Cpty CALYPSO	▼ Cou	interParty S	tatus CANCELED	ID v 6	3465
Book TRADINGC	➡ Broker		Remove Temp	late NONE	•
Contract Selection					
Fush FURONEXT	Carl FUD	Contract ATM EV C		Culture Com 1	
Exch EURONEXT 🔻	Ccy EUR 👻	Contract AIM FX E	UR/USD 👻	Future Sep 1	2 🔻
Exch EURONEXT Id Type BB_MARKET		Contract AIM FX E	EUR/USD 🗸	Future Sep 1	12 🔻
		Contract AIM FX E	eur/USD 🔻	Future Sep 1	12 •
	Value	Contract AIM FX E	ur/usd 🔻	Future Sep 1	·2
Id Type BB_MARKET	Value	Contract AIM FX E	UR/USD V		•
Id Type BB_MARKET Future FutureFX/AIM FX t	Value				•
Id Type B8_MARKET Future FutureFX/AIM FX I -Trade Buy Price	Value	Contract AIM FX E	aur/usd v		•
Id Type BB_MARKET Future FutureFX/AIM FX t	Value				•

2.4.6 FX Spot

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

🛃 🖌 Buy or Se							Tra	de Id: <u>10</u>	0466	Statu	s: PENDING		10:35:34		8
Deliv	verable		Тур	pe		Buy/S	ell	C	cy Pair		Book		Cou	nterparty	
Deli	verable		Outri	ight		Buy			JSD/JPY		TRADINGC		CALY	PSO	-]
Ccy JPY A	mount 1			-52,975	Date	03/08/2	012 Spot		78.13	Margin		0.00			
, A	mount 2			678.00						Final		78.1345			
Comments						Ļ F	inal Margin:		0.00	Delive	ery Known	Limits	SAVE(F	5) NEW	(F6)
🔀 Back to Ba	ack 🗙	Currency S	Split	💢 Spot F	lisk Transfer		Fwd Risk Tra	nsfer	Details			Keywor	ds		
Default				User (Override				Trade Date		/08/2012 07:4	Q- Fil	ter Keywords		
Split Curren	cy .			Ba	se Split Book				Alternate Settl		/08/2012 23:5	Stra	ategy		
Primary Boo	k			Qu	oting Split Bo	ook			Far leg Alterna	te		Bro			
Quoting Boo	k								Trader			CLS	S	false	
									Mirror Trader Sales			CLS	S_ELIGIBLE		
									Broker	JL	OY12	SPO	DT_MARGIN		
Previewed Trad	les Actual 1	rades							Role			Late	eTradeDate		
Routed Trades	Positions								Action		ounterParty	Late	eTradeDate		
									Internal Ref.		D_AMEND TOMS_4160	Rep	ortingCcyD		
Book Cu	rrency Pair	Primary	Quoting	ID	Туре	Mirror I	Book Counte	rparty	External Ref.		TOMS 4160	LIM	IT_BREAC		
TRADINGC USE	D/JPY	678.00	(52,975)	100466	Originating		CALYPS	0	Bundle Type	DL	_10H3_4100		IT_VIOLAT		
									Bundle Name				esB2B		
									CLS				esB2BFrom		
									Prime Broker				esB2BTo		
									This broker			Sav	edSalesB2		
Mr Routing	Reporting	Ourreport	Solit Date												
Rodulig	reporting	g contency a	opininate												

2.4.7 FX NDF

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



🖌 🖌 Buy o	r Sell						Trade	Id: <u>999</u>	65	Statu	IS: PENDING		10	:49:45	
D	eliverable		Туре		Bu	ıy/Seli		Co	y Pair		Book			Counte	rparty
No	on Deliverable		Outright			Sell		US	SD/KRW		TRADINGC			CALYPSO	•
Ccy USD	Amount 1		-10,000.0	00 Dat	e 09/	/01/2013 S J	pot		1,063.44	Margin		0	\$	USD	KRW
	Amount 2		10,634,4	00		Po	oints		0	Final		1,063.44	Near	0.0000	0.000
														USD	KRW
						Т	rader		1,063.44				Near	-10,000.00	10,634,4
				Res	et 07	/01/2013 Fi	xing	69	▼ USD/KRW FI	IX		•			
omment	s					Ç Final M	largin:		0.00	Deliver	y Unknown	Limits	SA	VE(F5)	NEW(F6)
🗙 Back t	to Back 🗙	Currency Split	🗙 Sp	oot Risk '	Transfer	 X Fwd	l Risk Trans	fer	Details			Keywo	ords		
Default				ser Over	ride				Trade Date		07/01/2013 19	Q - F	ilter Keyv	vords	
Split Cur	rency			Base S	plit Book				Alternate Sett			St	ategy		
Primary	Book			Quotin	g Split Book				Far leg Alterna	ite S			oker		
Quoting	Rook		T						Trader			CL	S	false	3
	Trades Actual T								Mirror Trader Sales			CL	S_ELIGI	BLE	
Previewed	Actual I	rades							Broker			SF	OT_MA	RGIN	
Routed Tra	des Positions								Role		CounterParty		IT_BRE		
Book	Current Pain	Deimanu		ID	T	Mirror Boo	h Caunt				FO_AMEND		IT_VIO	.AT	
	Currency Pair		Quoting		Туре	MILLIOL DOO		- 1	Internal Ref.		BB TOMS 582	_	lesB2B		
TRADINGC	USD/KRW	(10,000.00) 10	0,634,400	99965	Originating		CALYPS	i0	External Ref.		BB_TOMS_582	Sa	lesB2BF		
									Bundle Type			29	lesB2BT	-	
									Bundle Name			58	vedSales	iВ2	
								•	CLS						
٠ .									Prime Broker						
< ↑ Routine	Rate Rese	et							FTILLE DI OKEI						

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>).

File Futures Help Contract INTEREST RATE 0	001/HKEX/HKD/MM 👻 📑 New		From Date 14/01/2013	Show Futures	📕 Save Futures 🗖 S	ave Curve Underlyi	ings
Name	Value		BB_TICKER_EXCHANGE	Futures Existing	Curve Underlying Existing	Expiration Date	La
Contract Summary			IRF HKEX			14/01/2013	14
Exchange	HKEX					18/02/2013	18
Currency	HKD	Ξ			V	18/03/2013	18
Name	AIM INTEREST RATE 0001				V	15/04/2013	15
Туре	MM	-			V	13/05/2013	13
Details Underlying					V	17/06/2013	17
Details Underlying					V	15/07/2013	15
Name	Value				V	19/08/2013	19
🗏 General					V	16/09/2013	16
Quote Type	Future	Â			V	12/10/2013	12
Ouote Decimals	6				V	18/11/2013	18
Is Contract Size Variable		E				16/12/2013	16
Contract Size	3,000,000.000000	=					
No. of Futures in Contract	12						
Settle Type	Cash						
Negative Price Liquidation							
Attributes	Select						
Fungible with							
Future Name Month	Expiry Date						
Last CCP Date Lag	0						
Tick Type	Fixed	-					

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



rade	Back Offic	e Future	Analytics	Pricing Env	<u>M</u> arket Data	Utilities	Help				
rade	Details Fe	es									
Cpty Book	CALYPSO		▼ Broker	Cou	interParty	Status Remov		ID re	▼ NONE	1504	•
-Cont	ract Selection										
	Exch NYSE	•	Ccv US	D 🗸	Contract AIM	1 Interest Ra	te F 🔻	Fut	ure Dec	12	-
1	Exch NYSE	•	Ccy US	D 🗸	Contract AIM	1 Interest Ra	te F 🔻	Fut	ure Dec	12	•
	Exch NYSE	•	Ccy US Value	D V	Contract AIM	1 Interest Ra	te F 🔻	Fut	ure Dec	12	•
Id 1	Type ISIN	-	Value			1 Interest Ra	te F 🔻				
Id 1	Type ISIN	-				1 Interest Ra	te F 💌		ure Dec		• •
Id 1	Type ISIN	-	Value			1 Interest Ra	te F 🔻				
Id 1 Fu	Type ISIN	-	Value			I Interest Ra	te F •				
Id 1 Fu	Type ISIN uture Future	MM/AIM Inte	Value	re 0001/17/1	2/2012		te F •				

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.

File Future Options Help											
Contract OPTION 0001/H	ŒX/HKD/EquityIndex ▾ 📑 New	From Date 16/0	1/2013 🔉 Sho	w Future Options 🛛 🔓	Save Future Op	otions 🐺	Config -				Generate Strike
Name	Value	Expiration Date	Last Trade Date	First Delivery Date	Last Delivery D		Strike	Option Type	BB_TICKER_EXCHANGE	CUSIP	ISIN
Contract Summary							00-00000				
Exchange	HKEX	04/02/2013	04/02/2013	04/02/2013	04/02/2013	L	00-000	CALL	ESU2 HKEX 1200		
Currency	HKD	E 04/03/2013	04/03/2013	04/03/2013	04/03/2013		00-00000				
Name	AIM EQUITY INDEX OPTION 0	01/04/2013	01/04/2013	01/04/2013	01/04/2013		00-00000				
Туре	EquityIndex	06/05/2013	06/05/2013	06/05/2013	06/05/2013	.	00-00000				
Definition		03/06/2013	03/06/2013	03/06/2013	03/06/2013	.	00-00000				
		01/07/2013	01/07/2013	01/07/2013	01/07/2013		00-00000				
Name	Value	05/08/2013	05/08/2013	05/08/2013	05/08/2013		00-00000				
Underlying		02/09/2013	02/09/2013	02/09/2013	02/09/2013		00-00000				
Exchange	HKEX	≡ 07/10/2013	07/10/2013	07/10/2013	07/10/2013		00-00000				
Currency	HKD					1					
Name	AIM EQUITY INDEX 0001/HKEX	04/11/2013	04/11/2013	04/11/2013	04/11/2013		00-00000				
Underlying Dates											
General Quote Type	Price32										
Quote Type Ouote Decimals	0										
Exercise Type	European	+									

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



FutureOptionE	quityIndex/AIM E	QUITY INDEX O	PTION 0001/	PUT/1200-0	0/03/09/20	12 -PO is	S CALYPS	0 (10096		×
Trade Back Off	fice FutureOptio	n Analytics	Pricing Env	Market Dat	a Utilities	Help				
Trade Details	Fees									
Cpty CALYPSC)	▼	CounterParty	Sta	us PRICING	I	D 🔻	100965		
Book TRADING	sc 🗸	Broker			Remove	Temp	late	NONE	•	
	KEX	Currency HKD Value		on Contract			Show	iture Sep	12 •	
Underlying Fi	utureEquityIndex/AI	M EQUITY INDEX	0001/18/09/2	012			Show			
- Irade	Strike	1200-000	1200-000	▼ Pi	ice32 🚽	·]
BUY 👻	Quantity	901	-							
PUT -	Price	03-286								
	Nominal	0								

2.4.10 Vanilla FX Option

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

PricingSheet View I	MarketData Tools Analy	sis Processing Configuration	Help		
: 🗗 🖪 🖻 🗉) 🖳 🖬 🖌 📮 (🗴 • 🔳 • 🖪 🔲 🖂 (💀 🐼 💽 Trade/E	Bundle Id D Price F12	•
× Market Data			1	2	
Rate Sides	Mid	Strategy Name	Vanilla	Enter Strategy	
JSD/EUR Spot	0.0000	Price and Save	Active		
UR EURIBOR 6M Curve	ZC EUR Euribor	Solve			,
UR/USD Vol	EUR/USD VOL LAST Strat	Template			
SD LIBOR 3M Curve	ZC USD Libor 3M/6M	Trade Id	103465		
		Trade Version	0		
× Pricing		Bundle ID			
		Status	PENDING		
	25/01/2013	Action	FO_AMEND		
aluation Time	13:16:43	Sales Person	NONE		
ricing Env	INTRADAY	Trader	NONE		
Output 1 or 2 way	1-way	Book	TRADINGC		
		Counterpart Role	CounterParty		
× Solver		Counterparty	CALYPSO		
× Leg Details		Internal Book			
X Leg Details		Broker			
		Prime Broker			
		Notional	-10,000,000.00		
		Ccy1 Amount	-10,000,000.00		
		Ccy2 Amount	-42,400,000.00		
		Product Type	Vanilla		
		Constants			
		Ccy Pair	USD/EUR		
		Notional Ccy	USD		
		Settle Ccy			
		Quanto Ccy Pair			
		Quanto Factor			
		Buy/Sell	Sell		
		Put/Call	USD Put		
		Ccy2 Put/Call	EUR Call		
🗠 🗵 🖃 🔠 🔜		Compound Dut/Call			

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

Example:

Name = Bloomberg.TS/Config

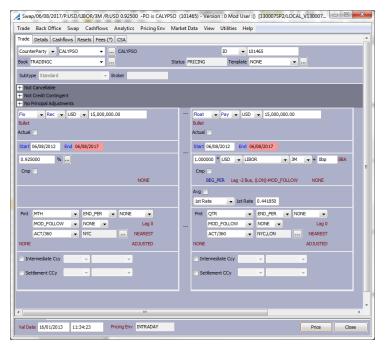
Interface Value = ExpiryTimeZone

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.



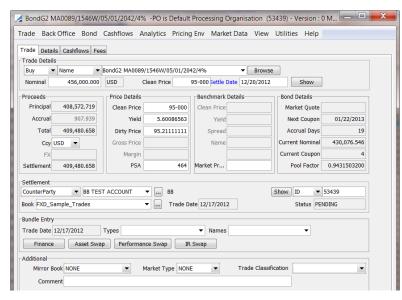
2.4.12 Asset Backed Securities

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.

Type/Ccy Code Bond chooser	Id Description	Туре	CUSIP	ISIN	BB_UNIQUE	TI
Bond chooser	5370 BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743	1	T
Type	52468 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
ALL>	54467 BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	MT
- Durrencies	66967 BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
ALL>	52967 BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	AN
Maturity From	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BA
- A Maturity To	62467 BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
Country	50967 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		-
🥔 Issuer	51967 BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
-	52469 BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	AN
	53467 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
	62967 BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
	3129 BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
	5363 BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025325	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	BCC0JVQP8	XS0220953235	MG!!00JVQP	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 09/18/14/2Y//18/09/2014	BondFRN	06538E4Z8			
	< III					Þ
? Query Edit	Clear Product Id: Add					



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



2.4.13 Basis Swap

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

Swap/12/27/2017/P:USD/LIBOR/6M /R:USD/LIBOR/3M +	10.25bp -PO is Default Processing Organisatio 💻 💷 💌
Trade Back Office Swap Cashflows Analytics Pricing	Env <u>M</u> arket Data View Utilities Help
Trade Details Cashflows Resets Fees CSA	
CounterP TEST ACCOUNT BB	ID 🔻 59934
Book FXD_Sample_Trades	us PENDING Tem NONE
Subtype Standard Broker	
+ Not Cancellable + Not Credit Contingent	
+ No Creat Contingent + No Principal Adjustments	
Float • Pay • USD • 10,000,000.00	Float • Rec • USD • 10,000,000.00
Bullet Act	Bullet Act
Start 12/27/2012 End 12/27/2017	Start 12/27/2012 End 12/27/2017
.000000 * USD V LIBOR V 6M V + Obp BBA	.000000 * USD • LIBOR • 3M • + 10.25bi BBA
BEG_PER Lag -2 Bus, (LON)-MOD_FOL NONE	BEG_PER Lag -2 Bus, (LON)-MOD_FOL NONE
Avg 📃	Avg
1st Rate Ist R 0.51	1st Rate • 1st R 0.00
Pmt SA VEND_PER VEND	Pmt QTR V END_PER V NONE V
MOD_FOLLOW V NONE Lag 0 ACT/360 VNYC,LON NEAREST	MOD_FOLLOW ▼ NONE ▼ Lag 0 30/360 ▼ NYC,LON NEAREST
NONE ADJUSTED	NONE ADJUSTED
Intermediate	Intermediate
Settlement	Settlement
Journalia	Sedementar

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	Id	Description	Type	CUSTP	ISIN	BB_UNIQUE	TI
(perce) code		+		TT3299696	XS0037419743	DD_UNIQUE	11
Bond chooser		BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%				005110520010	
- 🖉 Type		BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
- 🗅 <all></all>		BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	MT
- 🖉 Currencies		BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
- 🗋 <all></all>		BondANZ 5.101/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	AN
🦉 Maturity From		BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BA'
🖉 Maturity To	62467	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JGE
Country	50967	BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		
🖉 Issuer	51967	BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
-	52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	AN
	53467	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
	62967	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
	3129	BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
	5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025J25	US3620253254		
	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	BCC0JVOP8	XS0220953235	MG!!00JVQP	RM
	53967	BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
		FRNJPM 0 12/02/11/0D//02/12/2011	BondERN	481247AC8	US481247AC84		+
		FRNMTEG 0 09/18/14/2Y//18/09/2014	BondERN	06538E478			-

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

Frade Detai Buy Nominal			/2 03/31/49/0D/Pe	erpetual/3.5% Bri D00000 Settle Date 12/20/2	owse Show	
roceeds		Price Details		Benchmark Details	Bond Details	
Principal	226,980.000	Clean Price	97.00000000	Clean Price	Market Quo	te
Accrual	2,333.589	Yield	3.60836231	Yield	Next Coup	on 03/08/2013
Total	229,313.589	Dirty Price	97.99726027	Spread	Accrual Da	ys 104
Ccy	JPY 🔻	Gross Price		Name	Current Nomir	nal
FX		Margin			Current Coup	on 3.5
Settlement	229,313.589	Prepay S		Market Pr	Pool Fact	or
Settlement CounterPart Jook FXD_S Bundle Entry	ample_Trades		▼ BB ▼ Trade Da	ate 12/17/2012	Show ID Status	▼ 53438 PENDING
	12/17/2012	Types Performan	ce Swap R	Names Swap	•	

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.





Type/Ccy Code Bond chooser	Id	Description	Type	CUSIP	ISIN	BB UNIQUE	Т
Rond chooser	5370	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%		TT3299696	XS0037419743		T
- Ø Type	52468	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
<all></all>	5446	BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	M
- Ø Currencies	6696	BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
ALL>	5296	BondANZ 5.101/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	AN
Maturity From	69469	BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BA
Maturity To	6246	BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
Country	5096	BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		T
/ Issuer	5196	BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
	52469	BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	AN
	5346	BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
	6296	BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
	3129	BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
	5363	BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025325	US362025J254		T
	534	BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		Τ
	534	BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		Т
	5146	BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC0JVQP8	XS0220953235	MG!!00JVQP	RN
	5396	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		Т

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

Buy 🔹	▼ Name ▼	FRNMTFG 0 09/1	18/14/2Y//09/18/2	014 🔻 B	rowse	
Nominal	678,000.000	USD C	Clean Price 101.00	0000005ettle Date 12/24/	2012 Show	
roceeds		Price Details		Benchmark Details	Bond Details	
Principal	684,780.000	Clean Price	101.00000000	Clean Price	Market Quo	te
Accrual	0.000	Yield	0.00000000	Yield	Next Coupo	on null
Total	684,780.000	Dirty Price	0.00000000	Spread	Accrual Da	ys 0
Ссу	USD 🔻	Gross Price		Name	Current Nomin	al
FX		Margin	0.00		Current Coup	n
Settlement	684,780.000	Prepay S		Market Pr	Pool Facto	pr
ettlement						_
CounterPart	BB TES	F ACCOUNT	▼ BB		Show ID	▼ 53440
ook FXD_S	ample_Trades		▼ Trade Da	ate 12/17/2012	Status	PENDING
undle Entry	/					
rade Date	12/17/2012	Types		▼ Names	-	
Finance	Asset Swa	Performan	TR	Swap		

2.4.16 CP

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

Type/Ccy Code Bond chooser	Id	Description	Туре	CUSIP	ISIN	BB_UNIQUE	TI
Bond chooser	537	BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743	ĺ	T
- 🖉 Type	5246	B BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
	5446	7 BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	MT
- 🖉 Currencies	6696	7 BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
	5296	7 BondANZ 5.101/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	AN
- 🖉 Maturity From	6946	9 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BA
- Ø Maturity To	6246	7 BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
- Ø Country	5096	7 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		
- Ø Issuer	5196	7 BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
-	5246	9 BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	AN
	5346	7 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
	6296	7 BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
	312	9 BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
	536	3 BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025325	US3620253254		
	534	5 BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		
	534	5 BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		
	5146	7 BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC0JVQP8	XS0220953235	MG!!00JVQP	RM
		7 BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G2
	313	D FRNJPM 0 12/02/11/0D//02/12/2011	BondFRN	481247AC8	US481247AC84		Т



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

BondJL CP Dummy/10Y/CM	MS ISDAFIX 10AM 1Y/01/01/2 Cashflows Analytics Pricin			_ 0 <mark>_ x</mark>
Trade Details Cashflows Fee	s	-		
	BondJL CP Dummy/10Y/CMS ISDA	FJX 10AM 1Y/01/01, - Bro	wse	
Nominal 100,000.00	EUR Clean Price 79.73	8888889 Settle Date 12/24/2	012 Show	
Proceeds	Price Details	Benchmark Details	Bond Details	
Principal 7,973,888.89	Clean Price 79.73888889	Clean Price	Market Quote	
Accrual 0.00	Yield 0.0000000	Yield	Next Coupon	null
Total 7,973,888.89	Dirty Price 0.0000000	Spread	Accrual Days	0
Ccy USD 🔻	Gross Price	Name	Current Nominal	
FX.EUR.U 0	Margin 0.00		Current Coupon	
Settlement 7,973,888.890	Prepay S	Market Pr	Pool Factor	
Settlement				
CounterParty BB TES	T ACCOUNT 🔻 BB		Show ID • 56932	
Book FXD_Sample_Trades	🔻 📖 Trade D	ate 12/19/2012	Status PENDING	
Bundle Entry				
Trade Date 12/19/2012	Types	▼ Names	•	
Finance Asset Swap	p Performance Swap IF	R Swap		
Additional				
Mirror Book NONE	 Market Type NON 	IE 🔹 Trade Cla	assification	▼
Comment				

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.

✓StructuredFlows -PO is Gove	ernment of USA (31430) - Versio	on : 0 Mod User :(calypso_user) [150013/calypso1500]
Trade Back Office StructuredFi	ows Cashflows Analytics Pricin	ng Env Market Data View Utilities Help
Trade Details Fees Cashflows	Resets History	
Cpty CP	CounterParty St	itatus PENDING Trade ID 🔻 31430
Book Global	<u> </u>	troker Template NONE
Product Details		Reports
Product SubType	Standard	Cashflow Report
Collateral Type		
Direction	Receive	🗏 🧧 Report 👻 🌄 Data 👻 🙀 View 👻
Principal Disbursement	Schedule	
First Payment Date		
Revolving		
Open Term		
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	
	None	Reconventions
CouponFrequency	ZC	
Payment Day Count	ACT/360	
Payment Date Roll	FOLLOWING	
		Reconvention Type Reconvention Date Reconvention Effective Date
Effective Reset on reset date		
Select Settlement Currency	USD	
Stubs		
		No data was found based on criteria

It is set in the mapping for TradeType > Deposit.



Interface Mappings	^ \$		
InterfaceName		Name:	Bloomberg.TS/TradeType
Bloomberg.TS		Interface Value:	Deposit
BookHierarchyProductNode		Calypso Value:	StructuredFlows
CalendarCode		Reverse Default:	
DayCount Direction		<< Add	
⊕ III Fees ⊕ III FillType		>> Remove	
Frequency JGBType		Configure Interf	
OpenTerm Option Style		Configure Types]
PayReceive ProductCodeType			
PutCalIndicator RateDefinition			
RepoType ResetRoll			
TerminationType			
TradeKeyWordName TradeType			
Deposit	~		

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

💋 Calypso Mapping Window		
Calypso Mapping Window Interface Mappings InterfaceName Action Action Action BarrierType BookHierarchyProdu BuySell CalendarCode Config DateRoll DateRoll DateRoll DateCount	Name: Interface Value: Calypso Value: Reverse Default: << Add	Bloomberg.TS/TradeType Deposit
DayCount Direction Fees Fees FilType JGBType JGBType OpenTerm OptionStyle	<< Add >> Remove Configure Interfaces Configure Types	
PayReceive ProductCodeType ProductType ProductType PutCallIndicator RateDefinition RepoType ResetRoll TrandeKayWordName TradeKayWordName TradeKayWordName SepoSt		



Cpty CP Book Global	T				
Book Global		CounterParty	BrokerNONE	Status PENDING	ID v 30430
	v				Template NONE
roduct			ayment		
Direction	Loan		Payment Frequency	ZC	~
Start Date	12/10/2018		Payment Holidays		
End Date	12/20/2018		Roll Day	0	
Nominal	333,000		Date Roll	NO_CHANGE	Ŧ
Currency	USD	-	Period Rule	ADJUSTED	-
Day Count	ACT/360	-	Stub Rule	NONE	v
Discount Method	NONE		Lag	0 C	
Compounding Freque	NON		Stub Description	NONE	
Compounding Method	None	-	Principal Exchange		
Capitalize Method					
Rounding Method					
Rate					
Is Fixed Rate					
Fixed Rate	6.000000				
	0.000000				
Sales Margin					

2.4.18 FX Swap

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

<u>_</u>	Buy or	Sell					Trade I	d: <u>101</u>	<u>965</u>		Status: P	ENDING			14:53:00	- X
	De	eliverable		Туре		Buy/Sell		Cc	y Pair			Book			Counter	
	0	Deliverable		Swap		Buy / Sell		US	SD/JPY		т	RADINGC			CALYPSO	- I
Ccy	USD	Amount 1	2	3,000,000.00	Date	06/09/2012	Spot		56.70	Mar	gin		3.39	\$	USD	JPY
		Amount 2	-1,	,308,746,000			Points		23.59	Fina	I I		56.902	Near	0.00000	149.77778
							Trader		56.9359	1				Far	0.00000	10.51217
	Fai	r Amount 1	-2	3,000,000.00	Far date	05/10/2012	Far Points		49.67	Far	Margin		23.67		USD	JPY
	_										2				23,000,000.00	
	Fai	r Amount 2	1,	,320,968,200	Fwd/Fwd	26.08	Far Trader		57.1967	Far	Final		57.4334	Far	-23,000,000.00	1,309,496,82
Com	nents					🗘 Final	l Margin:		0.00	De	livery l	Jnknown	Limits	5	SAVE(F5)	NEW(F6)
×	Back to	Back 🗙	Currency Split	💢 Spot	Risk Transfe	r 🗙 F	wd Risk Transf	er	Details	1			Keyw	ords		
Defa	ult			User	Override				Trade Date		03/0	9/2012 20:	Q-F	ilter K	eywords	
s	olit Curr	ency		B	ase Split Book	k			Alternate Sett				St	rateg	v	
	imary B				uoting Split B				Far leg Alterna	ate				oker	,	
	, uoting E								Trader		NON	IE	NE	AR C	LS false	
									Mirror Trader					R CL		
									Sales		NON	IE			GIBL	
		rades Actual 1	and and						Broker						GIBL	
Prev	ewed II	rades Actual I	rades						Role			nterParty	SP	OT N	ARGIN 3.39	
Rout	ed Trad	des Positions							Action			AMEND	FA	R MA	ARGIN 23.67	=
	-					_			Internal Ref.			80116_FXS	La	teTra	deDa	
Book		Currency Pair	Primary	Quoting	ID	Туре	Mirror Book		External Ref.		2013	0116_FXS	La	teTra	deDa	
TRAD	INGC I	USD/JPY	23,000,000.00	(1,308,746,0	00) 101965	i Originating		CALI	Bundle Type				Re	portir	ngCc	
									Bundle Name				Re	portir	ngCc	
									CLS				LI	MIT_B	REA	
									CLS Far				LI	MIT_V	IOLA	
									Prime Broker				Sa	lesB2	В	
													Sa	lesB2	BFrom	
														lesB2		
													Sa	vedSi	alesB	
4																
•	Routing		Currency Split Ri					,					Sa	vedTr	ansf	

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	Туре	CUSIP	ISIN	BB_UNIQUE
Selection	50	50 Equity.VIE.PA	Equity		Í.	1
Products	50	56 Equity.CERN	Equity			
Equity	50	67 Equity.ILMN	Equity			
Currencies	50	58 Equity.JBHT	Equity			
- 🗋 <all></all>	50	59 Equity.MXIM	Equity			
Description like	50	70 Equity.QGEN	Equity			
Name	50	71 Equity.STX	Equity			
-	50	72 Equity.URBN	Equity			
	50	73 Equity.VOD	Equity			
	50	74 Equity.WCRX	Equity			
	53	28 Equity.HBCYF US	Equity		GB0005405286	
	53	57 Equity.BB-N.A.	Equity			N.A.
	53	72 Equity.BB-EQ000000000188761	Equity		US00763M1080	EQ000000000188761
	89	58 Equity.EATING PEANUTS	Equity		FR0000131906	
	99	57 Equity.EQUITY.DEMO20120710	Equity		US30303M1027	
	514	58 Equity.AAPL US	Equity	037833100	US0378331005	EQ0010169500001000
	514	71 Equity.TSCDF US	Equity		GB0008847096	EQ0011237000001001
	614	57 Equity.TPXXF US	Equity		JP3027630007	EQ000000001178246
	649	57 Equity.MLEEA 1E ID	Equity		IE00B29LVX72	EO000000005688619

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 V	
∩Trade Entry	
Buy Vame Equity.TPXXF US V Show Clas	sification 🗨 🗉
Quantity 111 Price 101 JPY Settle 14/12/2012 Cash Date	
Proceeds	
Negotiated Price 101 Gross Price	
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).



File Future Options Help			1							
Contract BOND OPTION 00	01/NYSE/USD/Bond 👻 📑 New		From Date 16/0	1/2013 🥥 Sho	w Future Options 🛛 🔓	Save F	uture Options	🐺 Config 👻	G	🌡 🙀 Generate Strik
Name	Value		Expiration Date	Last Trade Date	First Delivery Date	Last D		Strike	Option Type	BB_TICKER_EXCHANGE
Contract Summary								0.0000000		
Exchange	NYSE		04/03/2013	04/03/2013	04/03/2013	04/03/	L	0.000000	CALL	NBO1 NYSE 1005
Currency	USD	Ξ	03/06/2013	03/06/2013	03/06/2013	03/06/		0.0000000		
Name	AIM BOND OPTION 0001		30/08/2013	30/08/2013	05/08/2013	05/08/		0.0000000		
Type	Bond	Ŧ	02/12/2013	02/12/2013	02/12/2013	02/12/		0.0000000		
Definition					1.1.1		T			
		_	03/03/2014	03/03/2014	03/03/2014	03/03/	±	0.0000000		
Name	Value		02/06/2014	02/06/2014	02/06/2014	02/06/	.	0.0000000		
Underlying			29/08/2014	29/08/2014	04/08/2014	04/08/	1 m	0.0000000		
Exchange	NYSE	<u> </u>	01/12/2014	01/12/2014	01/12/2014	01/12/	<u>ب</u>	0.0000000		
Currency	USD		02/03/2015	02/03/2015	02/03/2015	02/03/	ŧ	0.0000000		
Name	AIM BOND FUTURE 000 1/NYSE		01/06/2015	01/06/2015	01/06/2015	01/06/	<u>ب</u>	0.0000000		
Underlying Dates										
General										
Quote Type	ASSET_SWAP_SPREAD	=								
Quote Decimals	0									
Exercise Type	American									
AutoExercise										
Settle Type Option	Cash									
No. of Option Contract	10									
Attributes	Select									
Fungible with										
Future Option Name Month	Expiry Date									
Ticks										
Tick Size	0.001									
Minimum move (ticks)	1.000000	-								

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

📕 Futur	eOption	Bond/AIM BOND	D OPTION 0001/CALL/1,005.000000/03/12/2012 -PO is CALYPSO (101466) - Vers 🗖 🖻 🗮
Trade	Back C	Office FutureOpt	tion Analytics Pricing Env Market Data Utilities Help
Trade	Details	Fees	
Cpty	CALYPS	50	CounterParty Status PRICING ID ID 101466
Book	TRADI	NGC	▼ Broker Remove Template NONE ▼
I		BB_MARKET ▼	
	Option	FutureOptionBond/	AIM BOND OPTION 0001/CALL/1,005.000000/03/12/2012 Show
Und	lerlying	FutureBond/AIM BC	OND FUTURE 000 1/17/12/2012 Show
Trade	<u> </u>	Strik	ke 1,005.000000 1,005.000000 • ASSET_S •
BUY	-	Quantit	ity 345
		Pric	ice 0.00000
CAL	L T	Nomin	nal 34,500,000,000

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	1
Rond chooser	5370 BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743	1	T
- Ø Type	52468 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	A
ALL>	54467 BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	Μ
	66967 BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
ALL>	52967 BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	A
- Ø Maturity From	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	B
- Ø Maturity To	62467 BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	J
- Ø Country	50967 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		Τ
🥖 Issuer	51967 BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
-	52469 BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	A
	53467 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	A
	62967 BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	J
	3129 BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		
	5363 BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025325	US362025J254		
	5345 BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked		US00764MAC10		
	5346 BondGN 11/1498W/01/01/2000/8%	BondAssetBacked		US362025AL26		
	51467 BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked		XS0220953235	MG!!00JVQP	R
	53967 BondG2 MA0089/1546W/01/05/2042/4%	BondAssetBacked	36179MC24	US36179MC241	MGG2MA0089	G
	3130 FRNJPM 0 12/02/11/0D//02/12/2011	BondFRN	481247AC8	US481247AC84		

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

🚽 BondG2 MA	0089/1546W/01/05/2	2042/4% -PO is CALYPS	0 (81965) - Version : 1 Mod Us	er :(calypso_user) [130007SP2/LOCAL_\	V130007SP2] (User: cal	ypso_user) 💷 💷	×
Trade Back O	Office Bond Cash	flows Analytics Prici	ng Env Market Data View	Utilities Help				
Trade Details	Cashflows Fees							
Trade Details								
Buy	• Name •	BondG2 MA0089/1546W/0	/05/2042/4%	✓ Browse]			
Nominal	0.00	USD Clean	Price 95-000 Settle Dat	e 20/12/2012	Show			
Proceeds		Price Details	Benchmark Details	·	Bond Details			
Principal	0.00	Clean Price	95-000 Clean Price		Market Quote			
Accrual	0.00	Yield	5.5879 Yield		Next Coupon	22/01/2013		
Total	0.00	Dirty Price 9	5.21111111 Spread		Accrual Days	19		
Ccy	USD 👻	Gross Price	Name		Current Nominal	0.00		
FX		Margin			Current Coupon	4		
Settlement	0.00	PSA	464 Market Price		Pool Factor	0.9211708700		
Settlement								
CounterParty	▼ CALYPSC	· · · · · ·	CALYPSO	Sh	10W ID 🔻 81	965		
Book TRADING	SC	◄	Trade Date 04/12/2012		Status PEND	ING		
Bundle Entry								
Trade Date	04/12/2012	Types	✓ Names		•			
Finance	Asset Swap	Performance Swa	IR Swap					
Additional								
Mirror	BookNONE	▼ Marke	t Type NONE 👻	Trade Classifica	ition	•		
Com	ment							

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.



🗾 Domain Values Window			
Search: workflowrulemessage	Find	Value	
workflowRuleERSReport			Name: workflowRuleMessage
workflowRuleExecution			
workflowRuleHedgeRelationshipDefinition			Value: RequestUnderlying
workflowRuleMessage			,
			Comment:
AcceptAfterCutOff			
			<< Add

- 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.

- Multi Filter (Cb1+F)	Edt Browse
Vorkflows	Worldow ALLIPSE-WMMININg/LPLOADSOLIRCEMSG/ALLIPENDING/REPROCESS/REPROCESSING
PO:ALL Product:ALL	Receiver Method ALL
 Subtype:PAYMENTMSG Subtype:RECEIPTMSG 	Currency AVV T Date Calculator Uploader T
Subtype:UPLOADSOURCEMSG TradeBundle	SD Fiber HH MM
	Date Roll NO_CHANGE Videoff Days Lag 0 Kideoff Time 0 : 3
	Holdays I No CutOff
	TimeZone GMT CutOff Days Lag 0 CutOff Time 0 : 7
	Check Holdsy Scan Frequency 10 10
	New Delete Save SaveAdlew
	NickOff Id Workflow Id Workflow Description Receiver Currency Method KickOff lag I

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.

	Id Description	Type	BB_UNIQUE	CUSIP	ISIN
Selection	0225 DOURGEDTE O 04/00/11/10/00/04/2011/0 /0	ponu		LI JUJ0235	A30120530300
	5347 BondAMR 9 09/15/16/30Y/15/09/2016/9%	Bond		001765AC0	US001765AC09
Products	5349 BondLBBW 4 1/2 09/20/14/184W/20/09/2014/4.5%	Bond		EI5672080	DE000LB0EDJ0
Bond	5351 BondSinking/10Y/01/01/2020/4%	Bond			
Equity	5352 BondAmortizing/10Y/01/01/2020/4%	Bond			
Currencies	5361 Bond983323ND4/314W/01/05/2011/4%	Bond		983323ND4	US983323ND49
- C <all></all>	5365 Bond341507MF5/15Y/01/07/2017/5%	Bond		341507MF5	US341507MF54
Ø Description like	5369 BondUKT 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 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond		ZZ2052021	GB0009125370A
	51967 BondT 6 5/8 10/15/34/0D/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	COEI 1023049	05252BAM1	US05252BAM19
	52967 BondANZ 5.101/13/20/10Y/13/01/2020/5.1%	Bond	COEI 1023007	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	06538E4Z7	US06538E4Z76
	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	GV912828NZ9	912828NZ9	US912828NZ91
	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.1259	6 Bond	COEH6270696	EH6270696	USG08820BW46



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

Trade Ba	ick Office Rep	Cashflo	ws Analytics	Pricing Env Mark	et Data View U	tilities Help		
rade Det	ails Fees Cash	flows Actio	ns Actions Input					
General								
r	10-	Direction	Start Date	End Date	Open/Term	Fill Type	Allocation Type	Notice Days Callable By
JGB	▼ Rep	، ۲	21/11/2012	21/11/2013	TERM -	PAR FILL	Under - Price 👻	0 NONE -
Security						Securit	es	
Name	➡ BondJG	B 1 1/2 03/2	0/19/506W/20/03	/2019/1.5%	- Brows	e Prd De	scription	Par (Original)
Nominal	10,000,000	Course la	200	2014	FX 1.0000000	Bond 10	B 1 1/2 03/20/19/506W/2	
	10,000,000	Quantity 2	.00	JPY	FX 1.0000000			
Clean	101.0000	Dirty	101.2548	Adj. 91.1293	Gross			
Yield	1.3280	Accrual	0.25479452	Acc.Days 62	Ouote			
Dirty Mon	ney Value 1	0,125,479	Adj. Money Valu	e 9,112,932	Value 9,112,	931		
Haircut	10.00000000	00 DirtyPi	rice 🔹	Regular 👻	Give	-		4
Funding						CashFle)WS	
	▼ 0.1	2000000 %				Type	Date	Amount
		2000000 /0				PRINCI		
-								
-						COUPO		
	al	9,112,931	Q JPY 👻	Basis ACT/365	▼ Freq ZC ▼		N 21/03/2013	74,383
FIXED	al		Q JPY -	Basis ACT/365		COUPO COUPO INTERE	N 21/03/2013 N 20/09/2013 ST 21/11/2013	3 74,383 3 75,616 3 -10,935
FIXED						COUPO	N 21/03/2013 N 20/09/2013 ST 21/11/2013	3 74,383 3 75,616 3 -10,935
FIXED						COUPO COUPO INTERE	N 21/03/2013 N 20/09/2013 ST 21/11/2013	3 74,383 3 75,616 3 -10,935 3 -9,112,931 ▼

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.

Interface Mappings	\$ Name:	Bloomberg.TS/Config
Bloomberg.TS	Interface Value:	RepoFactorOverrideForInflationIndex
BookHierarchyProductNode BuySell	Calypso Value:	1
CalendarCode Config RepoFactorOverrideForInflationIndex	Reverse Default:	
Videoracionale en la companya de la companya d	<< Add	

2.4.23 Security Lending

ype/Ccy Code Custom	Id Description	Туре	BB_UNIQUE	CUSIP	ISIN
Selection	3223 DOLINGEDTE O OLIOOLII TOLIOOLOLI 5011/0 /0	DOTIO		LI JUJ0239	A30120930300
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			
- Currences	5361 Bond983323ND4/314W/01/05/2011/4%	Bond		983323ND4	US983323ND49
Description like	5365 Bond341507MF5/15Y/01/07/2017/5%	Bond		341507MF5	US341507MF54
Description like	5369 BondUKT 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 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond		ZZ2052021	GB0009125370A
	51967 BondT 6 5/8 10/15/34/0D/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	COEI 1023049	05252BAM1	US05252BAM19
	52967 BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	COEI 1023007	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	06538E4Z7	US06538E4Z76
	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	GV912828NZ9	912828NZ9	US912828NZ91
	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	COEH6270696	EH6270696	USG08820BW46



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.

🔎 Domain Values Window			
Search: workflowrulemessage	Find	Value	
. workflowRuleERSReport			Name: workflowRuleMessage
workflowRuleExecution			
			Value: RequestUnderlying
			Comment:
AcceptAfterCutOff			
			<< Add

- 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.

- Multi Filter (Ctrl+F)	Edit Browse	
WorkSlows SeventMessage PoiAL Subtype:PAYMENTMSG Subtype:RAYMENTMSG Subtype:RECEIPTHSG Subtype:UPLOADSOURCEMSG TradeBunde	Workflow ALL/PSE-verefMessage/LPLCAD/SOLIR/CEMSG/ALL/PERE/DIMG/REPRIC/CESSING Receiver Method ALL Y Currency ANV Y Date Calculator Y SD Filter HH MM Date Roll NO_OMAGE KickOff Days Lag KickOff Time 13 Holdays If No CutOff 1 2	
	Check Holday Scan Frequency Check Holday Scan Frequency Check Holday Scan Frequency Sove Astronomy Sove Astronomy	flag

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



	etails Fees Cas	nflows Act	ions Actions In	out								
Cpty	CALYPSO		•	CounterParty	c	ALYPSO			Legal	-		
Book	TRADINGC		-	Status PRICIN	G		ID 🔹	101468		titution Limit	t	
Broker						Templ	ate NONE		v Subs		quency	-
General	Туре	Direction	Trade Date	e Start Dai	a	End Date	Open/Term	Fill Type	Allocation Type	Notice Day	vs Callable B	v
Unsecure		Lend	 22/11/2012 	22/11/2012		/11/2012	TERM -	PAR FILL			NONE	•
Security-	,							Securities	-1.			
Name	➡ BondJ	GB 1 1/2 03	/20/19/1049W/2	0/03/2019/1.5%		•	Browse	Prd Description	1		Par (Original)	Par
Nominal	10,000,000	Quantity	200	JPY	USD,	JPY FX 1.0	0000000000	BondJGB 1 1/2	03/20/19/1049W/20/0	3/2019/1.5%	-10,000,000	
Clean	101.0000	Dirty	101.258	Adj.	91.1330	Gross						
Yield	1.3280	Accrual	0.258904	1 Acc.Days	63	Quote						
Dirty Mo	oney Value	10,125,890	Adj. Money V	alue 9	113,301	Value	9,113,301					
Haircut	10.0000000	000 Dirty	Price 💌	Regular	•	Give	•					
Insecure	d		_					•				•
//iscourc	Dirty Money Va	1	Required (inc		1							
	10,125,890.	41 USD	•	0.00				Mar	rk Proc Auto	Marile	Mark Freg	
								Ma	 KPIOL AULO 			
ees	-			rrency FX Ra			Nominal				Daily Amour	
	Type	Fee Basis	Fee Cu	irrency FX Ra	te	Fee	Nominal	Day count	Rate/Amount I	Minimum Fee	Daily Amour	nt

2.4.24 Shin-Gensaki

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

ype/Ccy Code Custom	Id Description	Type	BB_UNIQUE	CUSIP	ISIN
Selection	J223 DOHUGEDIR O OT/00/11/101/00/07/2011/0 /0	DOLIO		LI JUJ0235	A30120530300
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
	5351 BondSinking/10Y/01/01/2020/4%	Bond			
Equity	5352 BondAmortizing/10Y/01/01/2020/4%	Bond			
Currencies	5361 Bond983323ND4/314W/01/05/2011/4%	Bond		983323ND4	US983323ND49
	5365 Bond 34150 7MF5/15Y /01/07/2017/5%	Bond		341507MF5	US341507MF54
- 🖉 Description like	5369 BondUKT 12 12/12/17/2031W/12/12/2017/12%	Bond		ZZ2021017	GB0003252318
	5370 BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.2	5% Bond		TT3299696	XS0037419743
	5371 BondIRAQ 5.8 01/15/28/1131W/15/01/2028/5.8%	Bond		462652AA6	XS0240295658
	50967 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond		ZZ2052021	GB0009125370A
	51967 BondT 6 5/8 10/15/34/0D/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	COEI 1023049	05252BAM1	US05252BAM19
	52967 BondANZ 5.101/13/20/10Y/13/01/2020/5.1%	Bond	COEI 1023007	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	06538E4Z7	US06538E4Z76
	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	GV912828NZ9	912828NZ9	US912828NZ91
	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.12	% Bond	COEH6270696	EH6270696	USG08820BW46

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



	ils Fees Cash	lows Acti	ons Actions Input							
eneral Typ	De	Direction	Start Date	End Date	Open/Te	erm Fi	ll Type Allo	ation Type	Notice Davs	Callable By
JGB	▼ Rep	D	▼ 21/11/2012	21/11/2013	TERM	▼ PAR FI	1	- Price 🔻	0 N	ONE 👻
ecurity							Securities			
Name	➡ BondJG	B 1 1/2 03/	20/19/506W/20/03	/2019/1.5%	-	Browse	Prd Description			Par (Original)
Nominal	10,000,000	Quantity	200	JPY	FX 1.00	2000000000		3/20/19/506W/20	/03/2019/1.5%	-10,000,000
Clean	101.0000	Dirty	101.2548	Adi. 91.1293	Gross					
Yield	1.3280	Accrual	0.25479452	Acc.Days 62	Quote					
Dirty Mone	ey Value 1	0,125,479	Adj. Money Valu	e 9,112,932	Value	9,112,931				
Haircut	10.00000000	00 Dirtyl	Price 👻	Regular 👻	Give	-	•			
unding							CashFlows			·
IXED	▼ 0.1	2000000	6				Type	Date	Amount	
			-				PRINCIPAL	21/11/2012	Anodin	9.112.931
							COUPON	21/03/2013		74,383
		9,112,93	1 Q JPY 👻	Basis ACT/365	✓ Freq ZC	• •	COUPON	20/09/2013		75,616
Principa	al l					0000000	INTEREST	21/11/2013		-11.046
Principa		10	B Type Gensaki	 Borrow R 				21/11/2013		-9.112.931

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.

PricingSheet View N	AarketData Tools Ana	lysi	s Processing Configuration H	lelp		
	😐 🗉	6	. • 🗉 • 🖽 🔟 🖂 💀	Trade/Bu	ndle Id ∑ Price F12	-
🗙 Market Data				1	2	
Rate Sides	Mid	11	Strategy Name	Barrier	Enter Strategy	
EUR/USD Spot	0.0000		Price and Save	Active		
EUR EURIBOR 6M Curve	ZC EUR Euribor		Solve			
EUR/USD Vol	EUR/USD VOL LAST Strat.		Template			
USD LIBOR 3M Curve	ZC USD Libor 3M/6M	-	Trade Id	98966		
		-1	Trade Version	0		1
No. Delation			🗄 Bundle ID			
× Pricing			Status	VERIFIED		
Valuation Date	25/01/2013		Action	FO_AMEND		
Valuation Time	13:22:22		Sales Person	-		
Pricing Env	INTRADAY		Trader	JMARKS		
Output 1 or 2 way	1-way		Book	TRADINGC		
			Counterpart Role	CounterParty		
× Solver			Counterparty	CALYPSO		
The Balanta			Internal Book			
× Leg Details			Broker			
B A .			Prime Broker			
			Notional	1,000,000.00		
			Ccy1 Amount	1,000,000.00		
		-	Ccy2 Amount	1,296,100.00		
			Product Type	Barrier		
			Constants			
			Ccy Pair	EUR/USD		
			Notional Ccy	EUR		
			Settle Ccy	USD		
			Quanto Ccy Pair			
		T	Quanto Factor			
			Buy/Sell	Buy		
			Put/Call	EUR Call		
			Ccy2 Put/Call	USD Put		
			Compound Put/Call			
🖂 🗵 🚍 🚮 💁 🔍			n n .			





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.

pe/Ccy Code Bond chooser	Id Description	Туре	CUSIP	ISIN	BB_UNIQUE	TI
Bond chooser	5370 BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743		T
🖉 Type	52468 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	AN
	54467 BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	MT
2 Currencies	66967 BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
ALL>	52967 BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	AN
Maturity From	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BA
Maturity To	62467 BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JGE
Country	50967 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		1
ssuer	51967 BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
	52469 BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	AN
	53467 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	AN
	62967 BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
	3129 BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		Т
	5363 BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025325	US3620253254		
	5345 BondAABST 2003-1 M1/36 1M/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	BCC0JVQP8	XS0220953235	MG!!00JVQP	RM
	53967 BondG2 MA0089/1546W/01/05/2042/4%		36179MC24	US36179MC241	MGG2MA0089	G2
	3130 FRNJPM 0 12/02/11/0D//02/12/2011	BondFRN	481247AC8	US481247AC84		
	54468 FRNMTFG 0 09/18/14/2Y//18/09/2014	BondFRN	06538E4Z8			

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

A BondJGB 1 1/2 03/20/19/1	1049W/03/20/2019/1.5% -PO	is Default Processing Organ	isation (46932) - Ve	ers 🗕 🗆 🗙					
Trade Back Office Bond	Cashflows Analytics Pricing	g Env Market Data View	Utilities Help						
Trade Details Cashflows Fee	es								
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 Benchmark Details Benchmark Details									
Principal 439,560.00	Clean Price 99.000	Clean Price	Market Quote						
Accrual 1,496.22	Yield 1.6760	Yield	Next Coupon	03/21/2013					
Total 441,056.22	441,056.22 Dirty Price 99.336986 Spread Accrual Days 82								
Ccy JPY 💌	Gross Price Name Current Nominal								
FX	Margin		Current Coupon	1.5					
Settlement 441,056.22	Prepay S	Market Pr	Pool Factor						
Settlement									
CounterParty BB TES	T ACCOUNT 🔻 BB		Show ID • 4	6932					
Book Sales	▼ Trade D	ate 12/06/2012	Status PEND	ING					
Bundle Entry									
Trade Date 12/06/2012	Types	▼ Names	-						
Finance Asset Swa	p Performance Swap IF	t Swap							
Additional									
Mirror Book NONE	 Market Type NON 	E 🔹 Trade Classi	fication	•					
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.



Trade Back Office X-Currency Swap Cashflows Analytics Pricing Env Market Data View Utilities Help Trade Details Cashflows Resets Fees (*)								
CounterParty CALYPSO Book TRADINGC	CALYPSO	Status Pl	ID V 101467 RICING Template NONE V					
Subtype Standard	- Broker	FX Adjustr	ment on USD Flows					
Fix • Rec • EUR • 1,0 Bullet Actual • Principal Exchange: Initial		>>	Actual 🤄 Principal Exchange: Initial 🗸 Final 🗸 Amort. Adj 🗸 EUR,US 🖌 Adj First Lag -2 (NYC, TARG					
Start 23/04/2012 End 24/04/2013 4.000000 %	, 		Start 23/04/2012 End 24/04/2017 1.000000 * USD LIBOR 6M + 4bp T3750					
Cmp	NONE		Cmp BEG_PER Lag -2 Bus, (LON) NONE					
			Avg NONE v 1st Rate 0.00					
Pmt PA END_P PRECEDING DAY 30/360 NYC	R VONE V 30 Lag 0	>>	Pmt SA END_PER NONE PRECEDING NONE Lag 0 ACT/360 NYC NEAREST					

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.

Type/Ccy Code Bond chooser	Id Description	Type	CUSIP	ISIN	BB_UNIQUE	Т
Bond chooser	5370 BondNGEODD 6 1/4 11/15/20/1482W/15/11/2020/6.25%	Bond	TT3299696	XS0037419743	1	T
✓ ✓ Type	52468 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252BAB5	US05252BAB53	COEH6526816	A
ALL>	54467 BondMTFG 0 09/18/14/2Y/18/09/2014/0.96425%	Bond	06538E4Z7	US06538E4Z76	COEJ3629247	M
Currencies	66967 BondT 1 1/4 09/30/15/5Y/30/09/2015/1.25%	Bond	912828NZ9	US912828NZ91	GV912828NZ9	Т
	52967 BondANZ 5.1 01/13/20/10Y/13/01/2020/5.1%	Bond	05252BAN9	US05252BAN91	COEI 1023007	A١
Maturity From	69469 BondBATSLN 8 1/8 11/15/13/256W/15/11/2013/8.125%	Bond	EH6270696	USG08820BW46	COEH6270696	BA
Maturity To	62467 BondJGB 1 1/2 03/20/19/1049W/20/03/2019/1.5%	Bond	EC0544550	JP1200411V08	COEC0544550	JG
Country	50967 BondUKT 8 09/25/14/0D/25/09/2014/8%	Bond	ZZ2052021	GB0009125370A		T
/ Issuer	51967 BondT 6 5/8 10/15/34/0D/15/10/2034/6.625%	Bond	694032AX1	JP3866800000	CODD5312515	Т
-	52469 BondANZ 3.7 01/13/15/5Y/13/01/2015/3.7%	Bond	05252BAM1	US05252BAM19	COEI 1023049	A۱
	53467 BondANZ 3.2 12/15/11/3Y/15/12/2011/3.2%	Bond	05252AAB7	US05252AAB70	COEH6519415	A١
	62967 BondJGB 1 1/2 03/20/19/506W/20/03/2019/1.5%	Bond	EH8259069	JP1103001952	COEH8259069	JG
	3129 BondFN 254998/0D/01/11/2023/4.5%	BondAssetBacked	31371LGF0	US31371LGF04		T
	5363 BondGN 281/2021W/01/01/2013/8.2%	BondAssetBacked	362025325	US362025J254		Т
	5345 BondAABST 2003-1 M1/361M/25/05/2033	BondAssetBacked	00764MAC1	US00764MAC10		Τ
	5346 BondGN 11/1498W/01/01/2000/8%	BondAssetBacked	362025AL2	US362025AL26		Т
	51467 BondRMAC 2005-NS2X A2A/1659W/12/09/2037	BondAssetBacked	BCC0JVQP8	XS0220953235	MG!!00JVQP	RN
	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		Т
	54468 FRNMTFG 0 09/18/14/2Y//18/09/2014	BondFRN	06538E4Z8			-

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



🛃 BondWIJ 0.8 12/20,	/22/10Y/12/20/2022/0	0.8% -PO is Defa	ault Processing Orga	nisation (53437) - Ver	rsion : 💻 🗖 🗙					
				View Utilities He						
Trade Details Cashflo	ws Fees									
Trade Details										
Buy 💌 Name	 BondWID 0.8 12/ 	20/22/10Y/12/20/2	2022/0.8% 🗸	Browse						
Nominal 123,0	000.000 JPY	Clean Price	98.000 Settle Date 12/	20/2012 Show						
Proceeds	Price Details Price Details									
Principal 120,54	0.000 Clean Price	98.000	Clean Price	Market Que	ote					
Accrual	0.000 Yield	1.0200	Yield	Next Coup	on 06/20/2013					
Total 120,54	Total 120,540.000 Dirty Price 98.000000 Spread Accrual Days 0									
Ccy JPY 💌	Gross Price		Name	Current Nomi	nal					
FX	Margin			Current Coup	on 0.8					
Settlement 120,54	0.000 Prepay S		Market Pr	Pool Fact	or					
Settlement										
CounterParty 💌	BB TEST ACCOUNT	▼ BB		Show ID	▼ 53437					
Book FXD_Sample_Tra	Ides	▼ Trade Da	ate 12/17/2012	Status	PENDING					
Bundle Entry										
Trade Date 12/17/201	2 Types		▼ Names	-						
Finance As	sset Swap Performan	nce Swap IR	Swap							
Additional										
Mirror Book NONE	•	Market Type NONE	Trac	le 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>.

(i) [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':



Interdence Managinese	74		 	_
Interface Mappings	Name:	Bloomberg.TS/ProductMapping		
Bloomberg.TS	Interface Value:	2,2,,,,		
BookHierarchyProductNode Buy Sell	Calypso Value:	Equity		
CalendarCode	Reverse Default:			
DayCount	<< Add			
Direction Fees	>> Remove			
FillType	Configure Interf			
	Configure Types			
Option Style Device Style Device Style				
ProductCodeType ProductMapping				
- ¥ 2.2				
RateDefinition				
ResetRoll				

Here is an example for 'TadeActionMapping' option:

Calypso Mapping Window				
FillType Frequency JGBType OpenTerm	Nar		inMapping	
Option Style PayReceive ProductCodeType	Interface Val Calypso Val			
TroductMapping State St	Reverse Defa	ilt:		
RateDefinition RepoType ResetRoll	<< Add			
RollOverFields TerminationType TradeActionMapping	Configure Inter			
NewN.N.N TradeKeyWordName TradeKeyWordName	Configure Typ	5		
DisambaraCIT.	~			 Clo



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		supported MS version			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	\checkmark	~	\checkmark			
Bond Future Option	~		~			
Callable Bond	\checkmark				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		supported MS version			Remarks
	TOMS		AIMS		
	V12	V20	V12	V20	
Equity Index Future	~	~	~		
Equity Index Future Option	~		~		
FX Forward	\checkmark		\checkmark		
FX Future	\checkmark	~	~		
FX NDF	\checkmark		\checkmark		
FX Option (Single Barrier)	~		~		
FX Option (Vanilla)	\checkmark	~	\checkmark		
FX Spot	\checkmark	\checkmark	~		
FX Swap	\checkmark	\checkmark			
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)	\checkmark		~		
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		supported MS version			Remarks
	TOMS		AIMS		
	V12	V20	V12	V20	
Repo and Reverse Repo	~	~			Mapped as repo trades in Calypso
Security Lending	~				
Shin-gensaki	\checkmark				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.

(i) [NOTE: End user should leave Short Note 1 on Bloomberg Systems empty except for rolling over a reporter 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.

nterface Mappings					
InterfaceName	Name:	Bloomberg.TS/RollOverFields			
BarrierType BookHierarchyProductNode	Interface Value:	Price			
BuySell CalendarCode	Calypso Value:	Sec. Clean Price			
DateRoll DayCount	Reverse Default:				
Direction Fees	<< Add				
FillType Frequency	>> Remove				
	Configure Interf				
Option Style DayReceive	Configure Types	i.			
ProductCodeType PutCallIndicator RateDefinition RepoType ResetRoll RelOUverFields Porce					

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	UPLOADSOURCEMSG	BloombergTOMS	BloombergTOMS		\checkmark		✓			
135706	COMPLETED	ALL	UPLOADSOURCEMSG	BloombergAIM	BloombergAIM		\checkmark		~			
132207	PENDING	ALL	UPLOADSOURCEMSG	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	UPLOADSOURCEMSG	BloombergTOMS	BloombergTOMS				~			
62706	PENDING	ALL	GATEWAYMSG	TradeUploader	TradeUploader							
45409	TO_BE_SENT	ALL	CONFIRM	MAIL	PRINTER				V			
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 UPLOADSOURCEMSG 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>