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Nasdaq Calypso

DTCC ASIC Rewrite

Version 17 - 18

Revision 2.0
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Approved

Document History

Revision	Published	Summary of Changes
1.0	July 2024	First edition for version 17, version 18
2.0	November 2024	Updates for version 5.7.0 – Added domain value "DTCC-ASIC-ISOMigration-UpdateEvent"

This document describes the DTCC ASIC Rewrite Setup Requirements.

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Overview of ASIC Rewrite Program

New ISO 20022 messaging format: Currently, ASIC reporting is done in FpML format. With rewrite program, ASIC will introduce the ISO20022 XML submissions for reporting as part of the global standardization. A fully standardized format for reporting aims to eliminate the risk of discrepancies in data.

New Reportable fields in the ISO messages: ASIC has introduced additional reportable fields for the rewrite program. The new fields are introduced to provide greater reconciliation details. Also, the new fields include linkage details to link the new trades to the open trade/positions.

Global Unique Transaction Identifier: To harmonize data across different jurisdictions, ASIC has adopted standard to define the structure of UTI.

Unique Product Identifier: ASIC has designated DSB (Derivative Service Bureau) as the service provider for the future UPI reporting. DSB will be the sole issuer of UPI codes and operator of the UPI reference data library. This will enable regulators to aggregate data on OTC derivatives transactions by product or by any UPI reference data element.

LEI Validity: Moving forward, LEIs will be validated by the Trade Repository (TRs)

Life cycle events with revised reporting logic: A combination of Action Type ('What') and Event Type ('When') will be introduced in message reporting to identify the life cycle event on a trade.

Data Reconciliation: With ASIC rewrite, there is increase in data quality reconciliation requirement & Operational processes & controls. Obligation to actively detect and report reporting breaches, obligation of informing delegated reporting counterparties about the quality & status of their reporting with reinforced monitoring.

Changes In Collateral and Valuation Report: Collateral reporting is to be done using Auth.108 message and Valuation reporting is to be done using Auth.030. ASIC will not support CSV submission.

Single Leg reporting of FX Swap: For FpML messages, FX Swap is reported as 2 FX Forward messages. This was done because there was no separate ISDA UPI for FX Swap. For ASIC rewrite, UPI is fetched from ANNA DSB which has separate UPI for FX Swap. So, FX Swap should be reported as Single leg.

ASIC Rewrite Setup

2.1   Message Setup

ASIC rewrite adopts ISO20022 messages for reporting Trade activity, Valuation and Margin activity reports to the TR (Trade Repository). This is radical shift from the current FpML messages. In addition to the change in message format, there are additional reportable fields.

Message Templates: To assimilate the ISO20022 format in Calypso, new message templates are created for the product type currently supported in Calypso DTCC module. Calypso will first map the mandatory and conditional tags in the ISO20022 message. Optional tags will be mapped if the required information is present in Calypso. The new XML templates created can be updated in the message setup window for each product type. This will be one time activity to trigger the new XML messages.

Sumbission	ISO Schema
Trade Reporting	Auth.030
Valuation Reporting	Auth.030
Margin Reporting	Auth.108
DTCC response	Auth.031

New Trade Activity, Valuation and Collateral ISO20022 templates are created for each product across all the asset classes. The product template contains XML tags as per the DTCC message specification.

Template names are created using format <productname>_ISO<messagetype>.xml. For ex. The TradeActivity template for IRSwap would be IRSwap_ISOTradeActivity

The list of all the templates created for each product type is given below.

Asset Class	Product Type	Trade Activity Template Name
Equity	Equity Forward	EquityForward_ISOTradeActivity.xml
	Equity Structured Option	EquityStructuredOption_ISOTradeActivity.xml
	Variance Swap	VarianceSwap_ISOTradeActivity.xml
	Dividend Swap	DividendSwap_ISOTradeActivity.xml
	Portfolio Swap	PortfolioSwap_ISOTradeActivity.xml

Asset Class	Product Type	Trade Activity Template Name
	Equity Linked Swap	EquityLinkedSwap_ISOTradeActivity.xml
Interest Rate	FRA	FRA_ISOTradeActivity
	Swap	IRSwap_ISOTradeActivity
	Cancellable Swap	CancellableSwap_ISOTradeActivity.xml
	Extendible Swap	ExtendibleSwap_ ISOTradeActivity.xml
	Xccy Swap	XCCySwap_ISOTradeActivity.xml
	NDS	NDS_ISOTradeActivity.xml
	CapFloor	CapFloor_ISOTradeActivity.xml
	Swaption	Swaption_ISOTradeActivity.xml
	Spread Swap	SpreadSwap_ISOTradeActivity.xml
	CappedSwap	CappedSwap_ISOTradeActivity.xml
	Spread Capfloor	SpreadCapFloor_ ISOTradeActivity.xml
	Treasury Lock	TreasuryLock_ ISOTradeActivity.xml
	Asset Swap	AssetSwap_ISOTradeActivity.xml
Credit	CreditDefaultSwap	CDS_ISOTradeActivity.xml
	CDSIndex	CDSIndex_ISOTradeActivity.xml
	CDSIndexTranche	CDSIndeTranche_ISOTradeActivity.xml
	CDSIndexOption	CDSIndexOption_ISOTradeActivity.xml
	CDSNthLoss	CDSNthLoss_ISOTradeActivity.xml
	CDSNthDefault	CDSNthDefault_ISOTradeActivity.xml
	ContingentCreditDefaultSwap	ContingentCDS_ISOTradeActivity.xml
	PerformanceSwap	Support will be provided in next patch release

Asset Class	Product Type	Trade Activity Template Name
FX	FX Forward	FXForward_ISOTradeActivity.xml
	FX Swap	FXSwap_ISOTradeActivity.xml
	FX ND Forward (NDF)	NDF_ISOTradeActivity.xml
	FX ND Swap	FXNDFSwap_ISOTradeActivity.xml
	Flexi Forward (Window Forward)	FXFlexiForward_ISOTradeActivity.xml
	FX Option	FXOption_ISOTradeActivity.xml
Commodity	Commodity OTC Option2	CommodityOption_ISOTradeActivity.xml
	Commodity Swap2	CommoditySwap_ISOTradeActivity.xml

All the new templates are delivered out-of-box and client need to configure the new templates in the message setup as shown below.

New templates need to be configured for each product type. Note that since ASIC rewrite has new MQ queues, new gateway needs to be configured as shown below. The gateway will be delivered out-of-box.

2.2 DTCC ASIC Connectivity

Calypso supports MQ and sFTP connection to send ISO20022 messages to DTCC.

2.2.1 MQ Connectivity

Changes in DTCC Gateway and MQ queues

ASIC rewrite program has separate MQ queues then the one used for FpML messages. To support the new MQ queues, new gateways are created. These gateways in turn will be configured on the new MQ queues.

Below New ISO gateways are created per asset class which needs to be configured on the message setup.

Asset Class	Gateway	ASIC rewrite MQ Input Queues
Interest Rate	DTCCGTRISORate	GTR.ASIC_RATES.A01
FX	DTCCGTRISOFX	GTR.ASIC_FX.A01

Asset Class	Gateway	ASIC rewrite MQ Input Queues
Equity	DTCCGTRISOEquity	GTR.ASIC_EQUITY.A01
Credit	DTCCGTRISOCredit	GTR.ASIC_CREDITS.A01
Commodities	DTCCGTRISOCommo	GTR.ASIC_COMMODITY.A01

Below steps need to be followed to support the new MQ connection.

- Include the new Gateway in the message setup for each product.
- Create new MQ queues .
- Update the name of the MQ queues in the attached properties files and these files can be patched during installation.

2.2.2   SFTP Connectivity

Changes to support SFTP connectivity.

- ASIC rewrite file sent via sFTP should be in ISO20022 XML format. The file should not contain header and trailer as required in FpML message. Multiple messages can be sent in a single sFTP file.
- To cater to the new format type, new DTCC content type 'ISO' is created in schedule task 'DTCC_EOD_Report'. Content Type ISO should be selected to send the ASIC rewrite messages to DTCC via sFTP. When schedule task with content Type ISO is executed, it will pick up all the ISO messages specified in the trade filer and collate them into a single file which will then be sent to DTCC. The file will be created at location specified in the feed config window.
- DATATRAK_SYSID for asset class Interest Rate, Foreign Exchange, Equity, Commodity and Credit is **60988**. DATATRAK_SYSID for Margin Activity report is **60989**.
- BizMsgldr is unique for each file submission. This field is different for message and file. To generate BizMsgldr for file, we are using randomizer which will generate random value for the tag.
- The transaction response message will be integrated to Trade browser. Collateral message will not be integrated to trade as collateralization is done at portfolio level. Messages response from DTCC will be matched to the outgoing message based on UTI and Reporting Timestamp.

2.3   Domain Values

To provide flexibility in reporting various XML tags given in the message specs multiple domains are modified and/or created.

List of all the domain is given below:

Domain Name	Domain Value	Domain Comment	Description
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Message-Def	auth.030.001.03_ASIC_DATTAR_1.0.0	This domain is used to populate the <MsgDefIdr> tag in the header
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Receiver	DDRL	This domain is used to populate the <Fr><OrgId> tag in the header
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-InterestRate	<Ocode>	This domain is used to populate the <To><OrgId> tag in the header of Interest Rate Trades
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Fx	<Ocode>	This domain is used to populate the <To><OrgId> tag in the header of FX Trades
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Equity	<Ocode>	This domain is used to populate the <To><OrgId> tag in the header of Equity Trades
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Credit	<Ocode>	This domain is used to populate the <To><OrgId> tag in the header of Credit Trades
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Commodity	<Ocode>	This domain is used to populate the <To><OrgId> tag in the header of Commodity Trades
DTCCGTR-ISOASIC-FloatingRateCode	Calypso defined Floating Rate ex. LIBOR	ASIC defined Floating rate ex. LIBO	This domain is required to report the floating rate code tag (<Fltg><Rate><Cd>) in ASIC reportable format.
DTCCGTR-XMLMessage-DayCountMapping	Calypso defined value of Daycount ex. ACT/360	ASIC defined DayCount code ex A004	This domain is required to report the DayCount code <DayCnt><Cd> in ASIC reportable format.
DTCC-GTR-ASIC-CorporateSectors	LE Attribute ASIC-CorporateSector name	ASIC defined Corporate Sector code.	This domain is used to populate the Financial Sector Code.
DTCCSwitches	DTCC-OverrideActionCorrToModi	ENABLE	If this domain is ENABLED, changes on the trade screen will be treated as Modification instead of Correction

Domain Name	Domain Value	Domain Comment	Description
DTCCSwitches	DTCC-ASIC-ISOMigration-UpdateEvent	ENABLE	You need to set to ENABLE to populate the trade keyword "DTCC-ASIC-ISOMigration-Version" to indicate the version of the trade that was used for ASIC ISO Migration. Deault is DISBLE.
DTCCGTR-XML-ActionType-MODI	ACCEPT_VERIFIED	Fox Ex. ACCEPT_VERIFIED	When DTCC-OverrideActionCorrToModi switch is Disabled, Calypso needs info on when to generate the MODI action. Format is ACTION_ENDSTATE This can be given for PPD and TradeState
GlobalUTI	ASIC	True/False	This Domain is used to switch to single leg reporting of FX Swap as required for ASIC rewrite. True will report single Leg whereas false will report 2 legs.
leAttributeType.ASIC-NonFinancial-CorporateSector			This is used to populate the NonFinancial Corporate sector tag value in the ASIC rewrite report. (<NFI> <Sctr> <Id>). The sector is to be selected in the LE Attribute ASIC-NonFinancial-CorporateSector

2.4   Trade Keywords (TKWs)

To support reporting of some tags in ISO message for which information is not present on the trade screen, Trade Keywords will be used. Trade Keywords (TKW) need to be populated while trade capture. Calypso code will pick these keywords and report in the ISO message.

ISO tag name	TradeKeyword Name	Value to be populated	Populated Manually	Comment
ClrSts	Reporting-ClearedTimestamp	Timestamp of cleared trade	Yes	By Default, clearingStatus will 'N'. If TKW is populated the clearingStatus will be 'Y'
UnqTxIdr	GTR-GlobalUTI/Issuer	LEI of UTI generating party	No	DTCCGTRSetGlobalUTI workflow rule will populate this TKW
UnqPdctIdr	ProductCode.UPI	UPI code from ANNA DSB	Yes, if Calypso's ANNA DSB	UPI from ANNA DSB should be populated in Product Code UPI field and UPI will be report in ISO message

ISO tag name	TradeKeyword Name	Value to be populated	Populated Manually	Comment
			interface is not used	
UnqPdctIdr	InstrumentUPI	UPI code from ANNA DSB	Yes	If UPI is not populated in ProductCodeUPI then code will check UPI in TKW InstrumentUPI.
CCP	GTR-CCP	Shortname of the CCP	Yes	If a trade is cleared by CCP then this field should be populated.
TradConf	GTR-ElectronicConfirmation	Electronic/ NonElectronic	Yes	By default, TradConf will be populated as Not confirmed, but if GTR-ElectronicConfirmation is populated manually then value from TKW will be used in reporting.

2.5 LE Attribute

Legal Entity Attributes are used to populate fields specific to LE in the ISO2022 messages.

ISO tag name	LE Attribute	Value to be populated	Comment
<SubmitgAgt>	DTCCGTR-ReportingAgent	Short Name of the Reporting Agent	DTCCGTR-ReportingAgent has the short name. If LE attribute is not populated then LEI of the PO or Party1 should be populated

2.6 Workflow Rules

The following workflow rules are used to populate some of the required TKWs. These TKWs are in turn used to populate the tags in the ISO message.

Workflow Rule	Tag Populated	Comment
DTCCGTRCleanNovation	PrrTxId	For ASIC rewrite, in case of Novation trade, PrrTxId tag is required. This tag should contain UTI info of the original trade. To get the original UTI info in the Novated trade, workflow rule DTCCGTRCleanNovation is used.
DTCCGTRExercise	PrrTxId	For ASIC rewrite, in case of Exercised trade, PrrTxId tag is required. This tag should contain UTI info of the original trade. To get the original

Workflow Rule	Tag Populated	Comment
		UTI info in the Exercised trade, workflow rule DTCCGTRExercise is used.
DTCCGTRSetGlobalUTI	TxId	ASIC rewrite mandates to report global UTI. Global UTI should start with LEI of the reporting Party. To populate complete LEI of the reporting party, DTCCGTRSetGlobalUTI is used.
DTCCGTRRevive	Action type <Rvv>	DTCCGTRRevive rule can be used to revive a terminated Trade.

Product Specific Cases

3.1 FX Swap

In FpML messages, FX Swap was reported as 2 FX Forward messages, one with near leg details and other with far leg details. The UTI for the 2 messages were identified using '-SN' and '-SF' tag in their UTI. The reason behind sending 2 FX Forward was that ISDA taxonomy does not cater to FX Swap UPI.

However, for ASIC rewrite, UPI is fetched from ANNA DSB which has separate UPI for FX Swap. In order to support single leg message generation for FX Swap, domain GlobalUTI is used. The value in the GlobalUTI domain specifies the jurisdiction i.e it should be ASIC. If the comment is set to true then single leg messages will be generated for FX Swap.

When single leg messages generation is set to true for FX Swap, UTI of the near leg will not contain '-SN' tag. This is because with single leg FX Swap message, there is no segregation of near and far leg. Also, note that DTCC does not accept message with '-' (hyphen) in the UTI.

3.2 Commodity Products

For Commodity Product reporting in FpML messages, ISDA provided UPI classification was mandatorily reported to DTCC. This classification was defined in Commodity Hierarchy window with Tree name as GTR-ISDA and GTR-BASE.

With ASIC rewrite, classification of commodity is done at 3 node level

- Base Product
- Sub product
- Additional Subproduct

A new tree 'GTR-ISO20022' is created to support 3 node level commodity specification. The tree will be provided out-of-box.

Each commodity product needs to be mapped to all the three trees i.e. GTR-ISDA, GTR-BASE and GTR-ISO20022 in the commodity Hierarchy window.

Node Name Level 1	Node Name Level 2	Node Name Level 3
Agricultural	Grain Oil Seed	FeedWheat
		Soybeans
		Rapeseed
		Other
		Maize

Node Name Level 1	Node Name Level 2	Node Name Level 3
		Rice
	Soft	RobustaCoffee
		Cocoa
		RawSugar
		WhiteSugar
		Other
	Potato	
	Olive Oil	Lampante
		Other
	Dairy	
	Forestry	
	Seafood	
	Live Stock	
	Grain	MillingWheat
	Other	
Energy	Electricity	Baseload
		FinancialTransmissionRights
		PeakLoad
		OffPeak
		Other
	Natural Gas	GasPool
		LNG
		NCG
		TTF
		NBP

Node Name Level 1	Node Name Level 2	Node Name Level 3
		Other
	Oil	Bakken
		Biodiesel
		Brent
		BrentNX
		Canadian
		Condensate
		Diesel
		Dubai
		ESPO
		Ethanol
		Fuel
		FuelOil
		Gasoil
		Gasoline
		HeatingOil
		JetFuel
		Kerosene
		LightLouisianaSweet
		Mars
		Naphta
		NGL
		Tapis
		WTI
		Urals

Node Name Level 1	Node Name Level 2	Node Name Level 3
		Other
	Coal	
	Inter Energy	
	Renewable Energy	
	Light End	
	Distillates	
	Other	
Environmental	Emissions	CER
		ERU
		EUA
		EUAA
		Other
	Weather	
	Carbon Related	
	Other	
Fertilizer	Ammonia	
	Diammonium Phosphate	
	Potash	
	Sulphur	
	Urea	
	Urea And Ammonium Nitrate	
	Other	
Freight	Dry	
	Wet	

Node Name Level 1	Node Name Level 2	Node Name Level 3
	Container Ship	
	Other	
Industrial Product	Construction	
	Manufacturing	
Inflation		
Metal	Non Precious	Aluminum
		AluminumAlloy
		Cobalt
		Copper
		IronOre
		Molybdenum
		NASAAC
		Nickel
		Steel
		Tin
		Zinc
		Other
		Lead
	Precious	Gold
		Other
		Palladium
		Platinum
		Silver
Multi Commodity Exotic		

Node Name Level 1	Node Name Level 2	Node Name Level 3
Official Economic Statistics		
Other		
Other C10		
Paper	Container Board	
	Newsprint	
	Pulp	
	Recovered Paper	
	Other	
Polypropylene	Plastic	
Other		

Trade Lifecycle Reporting in ASIC Rewrite

ASIC has introduced the concept of the "Event Type" field. This field allows for reporting of the business reason behind the submission and is used in conjunction with the Action Type. The Action Type field can be considered "the What" (e.g. what is being reported – a modification) and the Event Type can be considered "the Why" (e.g. why is a modification being reported). All trade submissions received post go-live must contain the applicable "Action Type" and "Event Type" values. It should be noted that the Event Type field is not applicable for certain Action Types on the Trade Activity submission and when submitting Margin activities.

Action Type

Action Type	Value	Description	Supported in Calypso
New	NEWT	A report of a derivative, at a trade or position level, for the first time	Yes
Modify	MODI	A modification to the terms or details of a previously reported derivative, at a trade or position level, but not a correction of a report	Yes
Correction	CORR	A report correcting the erroneous data fields of a previously submitted report	Yes
Termination	TERM	A termination of an existing derivative at a trade or position level.	Yes
Error	EROR	A cancellation of a wrongly submitted entire report in case the derivative, at a trade or position level, never came into existence or was not subject to Regulation (EU) No 648/2012 reporting requirements but was reported to a trade repository by mistake or a cancellation of a duplicate report.	Yes
Revive	REVI	Re-opening of a derivative, at a trade or position level, that was cancelled with action type 'Error' or terminated by mistake.	Yes
Valuation	VALU	An update of a valuation of a derivative.	Yes
Position Component	POSC	A report of a new derivative that is included in a separate position report on the same day.	No
Margin Update	MARU	a new margin balance or a modification of the details of the margins shall be identified as 'Margin update';	Yes

Event Type

Event Type	Value	Description	Supported in Calypso
Trade	TRAD	Conclusion of a derivative or renegotiation of its terms that does not result in change of a counterparty	Yes
Step-In	NOVA	An event, where part or entirety of the derivative is transferred to a counterparty 2 (and reported as a new derivative) and the existing derivative is either terminated or its notional is modified.	Yes
PTRR	COMP	Post-trade risk reduction exercise	No
Early Termination	ETRM	Termination of a derivative at a trade or position level	Yes
Clearing	CRLG	Clearing as defined in Article 2 point (3) of Regulation (EU) No 648/2012	No
Exercise	EXER	The exercise of an option or a swaption by one counterparty of the transaction, fully or partially.	Yes
Allocation	ALOC	Allocation event, where an existing derivative is allocated to different counterparties and reported as new derivatives with reduced notional amounts.	No
Credit Event	CREV	Applies only to credit derivatives. A credit event that results in a modification of a derivative, at a trade or position level	No
Corporate Event	CORP	A corporate action on equity underlying that impacts the derivatives on that equity	No
Inclusion in Position	INCP	Inclusion of CCP-cleared derivative or CFD into a position, where an existing derivative is terminated and either a new position is created or the notional of an existing position is modified.	No
Update	UPDT	Update of an outstanding derivative performed during the transition period in order to ensure	Yes

Event Type	Value	Description	Supported in Calypso
		its conformity with the amended reporting requirements	

Calypso's life cycle event and Action type/Event Type generation in ISO Message

Calypso current Trade Event	Trade generated or updated in Calypso	Action type	Event type
New trade	New Trade manually entered	NEWT	TRAD
Modification	Original trade updated from the trade screen	CORR	<Blank>
Amendment	Trade is amended using mutually agreed terms with the counterparty. This is executed from Termination window where is Trade Notional is increased or decreased	MODI	TRAD
Cancellation	Original trade cancelled	EROR	<Blank>
Notional Increase (via the Termination window)	Original trade is terminated and new trade captured with new notional	MODI	TRAD
Notional Increase via Trade window	Notional is increased from the trade capture screen. This is treated as correction which means amount was errorenously send earlier and is not corrected	CORR	<Blank>
Full termination	Original trade terminated	TERM	ETRM
Notional Decrease via Termination window (Partial Termination)	Original trade is terminated and new trade is created with the outstanding amount. Note that the new trade is created with same UTI. So, in case of partial termination, the terminated trade should not send any termination message. For the new trade captured with outstanding amount, MODI should be sent	MODI	TRAD
		NEWT	NOVA

Calypso current Trade Event	Trade generated or updated in Calypso	Action type	Event type
Novation - PO is Transferee	New trade created (with a StepIn Transferor input in the Details panel). Refer Novation Flowchart		
Full Novation - CP is the Transferor or PO is Remaining Party	Original trade terminated. Refer Novation Flowchart	TERM	NOVA
	New trade genarated with new cpty and full amount	NEWT	NOVA
Partial Novation - PO is Remaining Party	Original trade terminated and 2 new trades created. Refer Novation Flowchart	TERM	NOVA
	1st trade created with the new notional amount and new transferee from the novation window.	NEWT	NOVA
	2nd trade created with remaining notional (original - novation amount/percentage) with the remaining party	NEWT	NOVA
Full Novation - PO is Transferor	Original trade terminated. Refer Novation Flowchart	TERM	NOVA
Partial Novation - PO is Transferor	Original trade terminated. Refer Novation Flowchart	TERM	NOVA
	New trade generated with old PO for remaining amount	NEWT	NOVA
Swaption Exercise	Original trade (swaption) exercised	MODI	EXER
	Resulting trade (swap) generated upon exercise of the swaption	NEWT	EXER
OTC BondOption Partial Exercise**	Original Trade terminated	TERM	EXER
	New trade generated with old cpty for remaining amount	NEWT	EXER
OTC BondOption	Original Trade terminated	TERM	EXER

Calypso current Trade Event	Trade generated or updated in Calypso	Action type	Event type
Full Exercise**			
FX Option Exercise (Vanilla)	Original trade terminated	TERM	EXER
	New underlying trade created	NEWT	EXER

Valuation Report

Valuation report submission for ASIC rewrite is in XML format. The schema for Trade Activity report and Valuation report is same i.e AUTH.030

Before ASIC rewrite, a single CSV file is created for all trades to be reported, and this file is uploaded to DTCC via SFTP. Since, Calypso has a existing framework to report valuation report in CSV format, the same framework will be used to report the valuation messages in XML format. This is achieved by creating a schedule task which will read the valuation report template and generate valuation file containing XML valuation messages.

5.1 Building of Valuation report Template

Valuation report template can be built with the below fields. Users can build a valuation report template using the Trade Browser or the Valuation Report. Kindly refer to valuation and Collateral report document for FpML message.
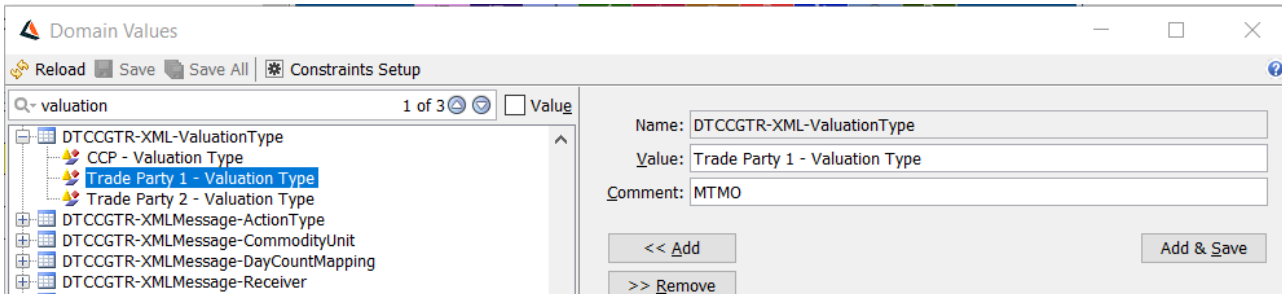
The creation of templates remains same but only below fields should be mapped. Note that the fields highlighted i.e. Valuation Amount, Valuation Currency and Delta should have same offset i.e the column position in the template should be same. This is done to provide flexibility to user while mapping those fields. User can map other available fields for Valuation Amount, Valuation Currency and Delta.

Offset	DTCC reportable field	Calypso Mapping
0	Reporting Counterparty LEI	DTCC GTR TradeParty 1 Value
1	Other Counterparty LEI	DTCC GTR TradeParty 2 Value
2	Submitting Agent LEI	DTCC GTR Data Submitter Value
3	Valuation Amount	Pricer.NPV
4	Valuation Currency	Pricer.NPV Currency
5	Valuation Timestamp	DTCC GTR Valuation Datetime
6	Valuation Type	DTCC GTR Valuation Type Party 1 Short Name
7	Delta	PLMARK.DELTA.MeasureValue
8	Reporting Timestamp	Reporting Timestamp
9	Transaction Identifier	DTCC GTR UTI Value
10	Technical Record Identifier	Technical Record Identifier

Valuation Type for the report is taken from domain DTCCGTR-XML-ValuationType.
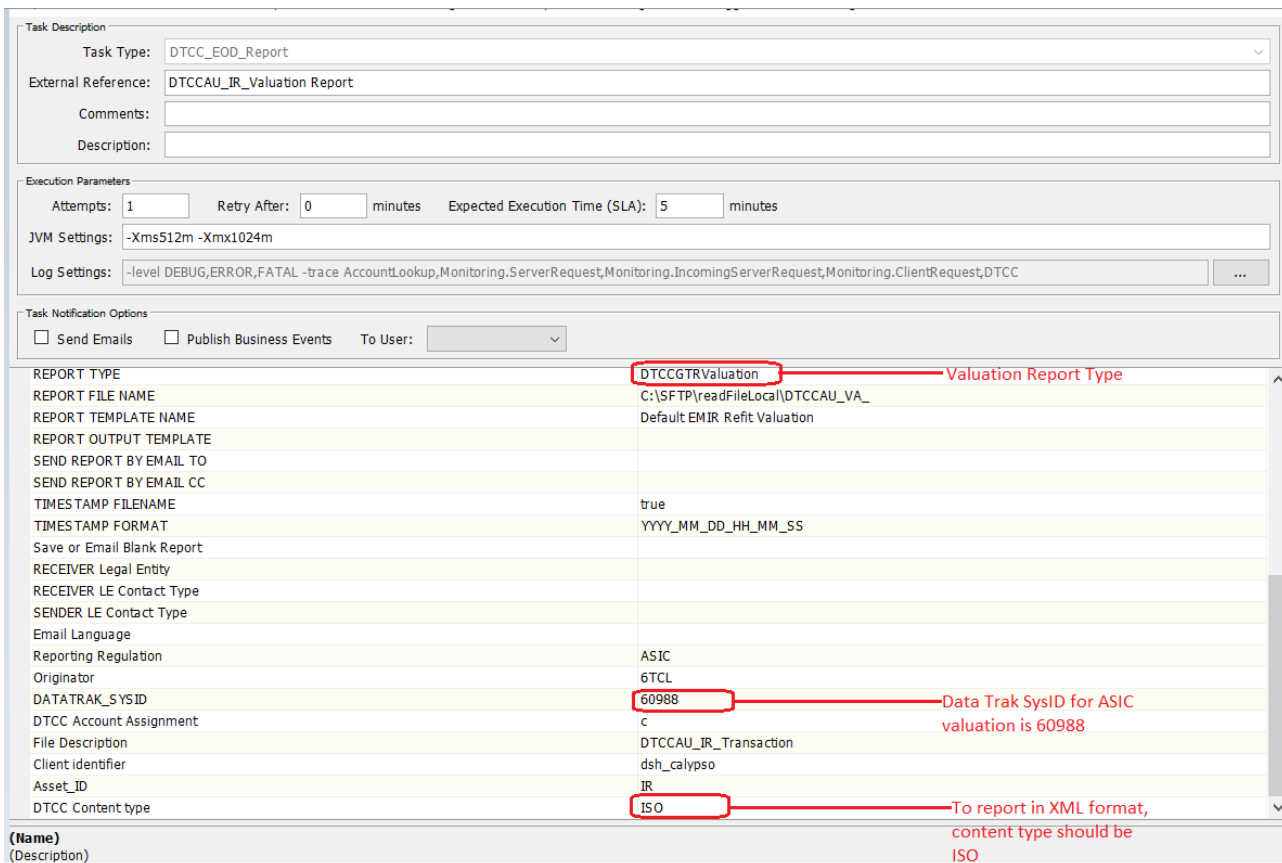
Users need to input Valuation Type as MTMO (Mark-To-Model), MTMA (Mark-To-Market) or CCPV (Central Counterparty).

Technical record identifier is created by concatenating 'VALU' with the TradeID . DTCC returns the value of Technical record identifier in the Original Record ID tag of the response message. Thus the value in the Original Record ID can be used to integrate valuation response message to the corresponding trade.

5.2 Scheduled Task

Use the DTCC_EOD_Report schedule task to export Valuation Report.

- Set Trade Filter and Pricing Env

- Set attributes as

  REPORT TYPE   : DTCCGTRValuation

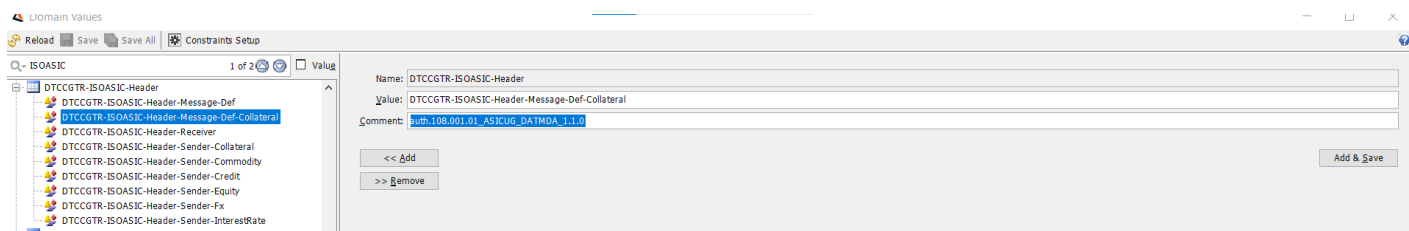 REPORT FILE NAME   : Name and location of your report

  DATATRAK_SYSID   : Value should be 60988 for Valuation report

  DTCC CONTENT TYPE   : ISO should be selected for reporting in ISO format

5.3   Valuation report response message

Valuation response message will be linked to the trade using TradeID mentioned in the technical record Identifier.

Margin (Collateral) Reporting

ASIC requires Margin reporting to be done in XML format. AUTH.108 schema is required for margin reporting.

6.1 Building of Margin reporting template

Existing Calypso framework of reporting Margin contracts in CSV format will be used. For this purpose, a Margin reporting template must be created with below fields.

S. No	DTCC Field name form AUTH.108	Calypso Collateral Value Report Mapping
1	Reporting Timestamp	Reporting TimeStamp
2	Reporting Counterparty	DTCC GTR Trade Party Value
3	Other Counterparty	DTCC GTR Data Other Party Value
4	Submitting Agent	DTCC GTR Data Submitter Value
5	Event Date	DTCC GTR Reporting Date
6	Collateral Portfolio Code	DTCC GTR Collateral Portfolio Code. Value is derived from Calypso's margin call window variable Reporting_CollateralPortfolioCode
7	Collateralisation Category	DTCC GTR Collateralized. Value is derived from Calypso's margin call window variable Reporting_collateralisationstatus.
8	TimeStamp	DTCC GTR Collateral Valuation Date Time
9	Initial Margin Posted Pre Haircut	Initial Margin Posted by Reporting Counterparty Pre-Haircut
10	Currency of Initial Margin Posted Pre Haircut	Currency of Initial Margin Posted
11	Initial Margin Posted Post Haircut	Initial Margin Posted by Reporting Counterparty Post-Haircut
12	Currency of Initial Margin Posted Post Haircut	Currency of Initial Margin Posted
13	Variation Margin Posted Pre Haircut	Variation Margin Posted by Reporting Counterparty Pre-Haircut
14	Currency of Variation Margin Posted Pre Haircut	Currency of Variation Margin Posted
15	Variation Margin Posted Post Haircut	Variation Margin Posted

S. No	DTCC Field name form AUTH.108	Calypso Collateral Value Report Mapping
16	Currency of Variation Margin Posted Post Haircut	Currency of Variation Margin Posted
17	Excess Collateral Posted	Excess Collateral Posted
18	Currency of Excess Collateral Posted	Currency of Excess Collateral Posted
19	Initial Margin Received Pre Haircut	Initial Margin Collected by Reporting Counterparty Pre-Haircut
20	Currency of Initial Margin Received Pre Haircut	Currency of Initial Margin Collected
21	Initial Margin Received Post Haircut	Initial Margin Collected by Reporting Counterparty Post-Haircut
22	Currency of Initial Margin Received Post Haircut	Currency of Initial Margin Collected
23	Variation Margin Received Pre Haircut	Variation Margin Collected by Reporting Counterparty Pre-Haircut
24	Currency of Variation Margin Received Pre Haircut	Currency of Variation Margin Collected
25	Variation Margin Received PostHaircut	Variation Margin Collected
26	Currency of Variation Margin Received Post Haircut	Currency of Variation Margin Collected
27	Excess Collateral Received	Excess Collateral Collected
28	Currency of Excess Collateral Collected	Currency of Excess Collateral Collected

Value derived from Margin Call window fields.

6.2 Scheduled Task

- Set Trade Filter and Pricing Env
- Set attributes as

REPORT TYPE : DTCCGTRCollateralValue

REPORT FILE NAME : Name and location of your report

DATATRAK_SYSID : Value should be **60989** for Margin report
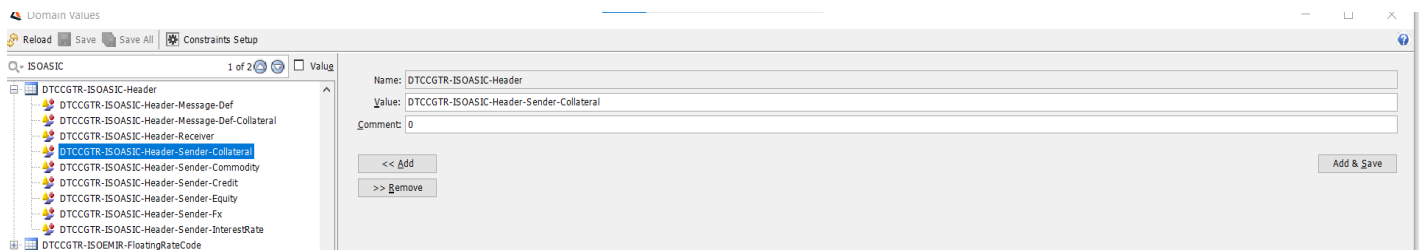
DTCC CONTENT TYPE : ISO should be selected for reporting in ISO format

To populate From ID (<Fr>) in Margin report header and Message Definition Identifier (<MsgDefIdr>) in Margin report header, 2 new domains are created under DTCCGTR-ISOASIC-Header.

DTCCGTR-ISOASIC-Header-Message-Def-Collateral should contain the schema name (auth.108.001.01_ASICUG_DATMDA_1.1.0) of Margin report.

DTCCGTR-ISOASIC-Header-Sender-Collateral should contain the O-code for collateral.

ASIC Rewrite Installation Steps
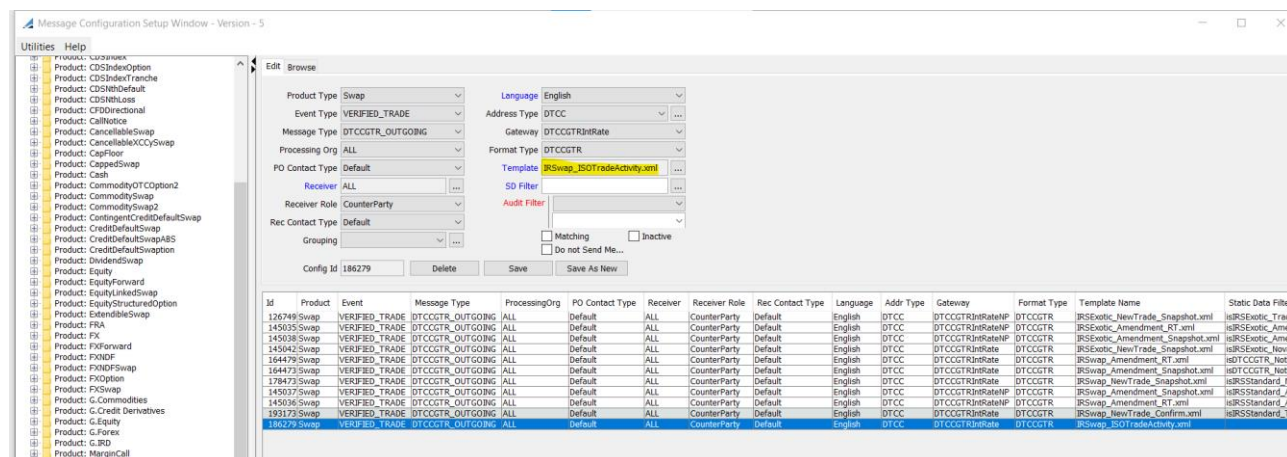
1. **Calypso Installation**: Install the DTCC patch provided in the Calypso MR/MHF.

2. **Message Setup changes**: With ASIC rewrite, the existing FpML message submission will be rejected by DTCC and only ISO message submission will be accepted. For the same reason, new ISO templates should be configured in Message Setup window instead of FpML message. Note that for testing, both the FpML and ISO messages can be submitted.

Below is the message setup for IR Swap which has been updated with the template Name 'IRSwap_ISOTradeActivity.xml'. Template name for each of the supported product is mentioned in section 5.1 of this document.

Key points to note.

- For clients using sFTP connection, no additional changes are required in message setup except for configuration of the new template.

- For clients using MQ connection, additional change in Gateway field is required to support the new MQ queues. This will be discussed later in MQ connectivity section.

- The same ISO template is to be configured for all the life cycle events like Termination, Cancellation, etc and ISO message will be generated as per the event type.

- All the out-of-box SD filter can be used as per client requirements.
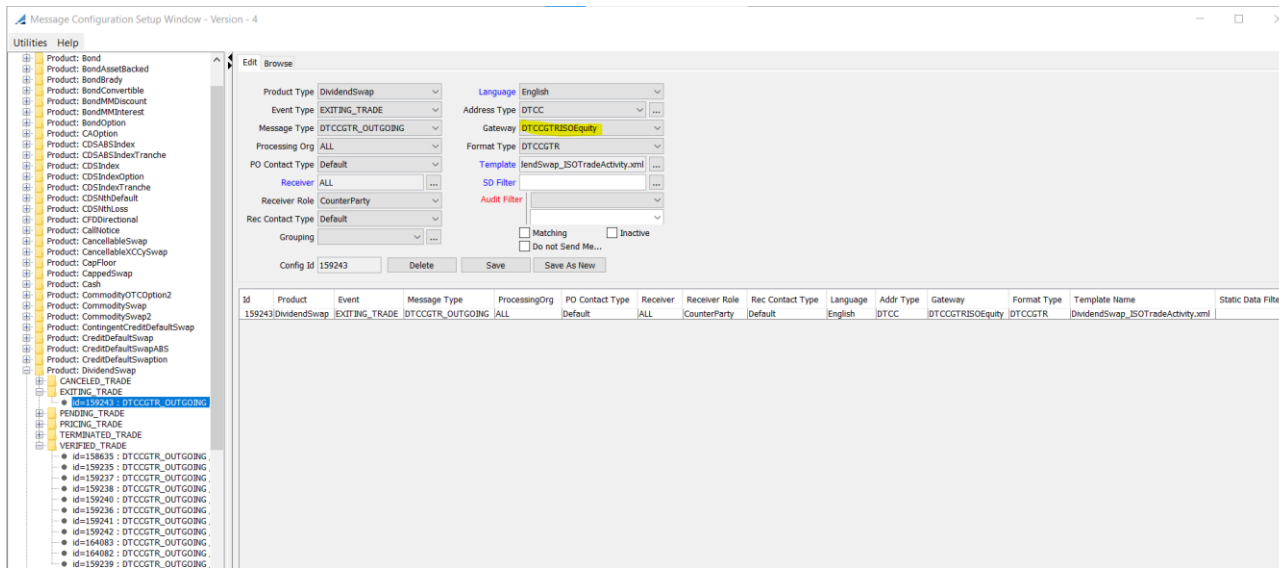
Message setup for ISO Message

Message setup for lifecycle events: The template used while capturing the trade should be used for other lifecycle events of the trade. The template will pick up the correct Action type and Event type in the message for reporting to DTCC.

Message setup for MQ connection: If MQ connection is used for DTCC reporting then changes in message Gateway field of message setup is required. For ASIC rewrite, new outgoing queues are created. To write the message to these queues, new Gateways are created for each of the asset classes.

Message setup should use the new Gateways corresponding to the asset class.

Asset Class	Gateway Name Name
Interest Rate	DTCCGTRISORate
Foreign Exchange	DTCCGTRISOFX
Equity	DTCCGTRISOEquity
Credit	DTCCGTRISOCredit
Commodities	DTCCGTRISOCommo

Sample message setup with new gateway in the message setup.

3. **Domain Changes**: To provide flexibility in terms of values being reported to DTCC, some of the variables are reported from Domain and should be configured before reporting to DTCC.

- Header of the ISO template has variable values and so are parametrized using domain 'DTCCGTR-ISOASIC-Header'. Various subcomponents for this domain are used to populate the ISO message header details. O-code of the organisation is to be populated in the highlighted domain.

Header Name	Header Value	Comment value	Usage
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Message-Def	auth.030.001.03_ASIC_DATTAR_1.0.0	To populate Message Def
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Receiver	DDRS	To populate 'To' tag
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-InterestRate	6<O-code of organization>	To populate 'From' tag in IR template
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Fx	5<O-code of organization>	To populate 'From' tag in Fx template

Header Name	Header Value	Comment value	Usage
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOEMIR-Header-Sender-Equity	4<O-code of organization>	To populate 'From' tag in EQ template
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Credit	3<O-code of organization>	To populate 'From' tag in CR template
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Commodity	2<O-code of organization>	To populate 'From' tag in CO template
DTCCGTR-ISOASIC-Header	DTCCGTR-ISOASIC-Header-Sender-Collateral	0<O-code of organization>	To populate 'From' tag in Collateral template

- With ASIC rewrite, UPI fetched from ANNA DSB is used for reporting. As such, single leg reporting of FX Swap can be done instead of reporting 2 FX Forward. To enable single leg reporting of FX Swap, domain GlobalUTI is used. When the domain is Enabled for ASIC, single leg reporting of FX Swap will be done.

4. **Scheduled Task Changes** (for Trade and Transaction reporting using sFTP):

For DTCC reporting using sFTP, below changes are required.

- DATATRAK_SYSID to be updated with the new ISO XML submission as given below.

Submission ID	Submission Format	Environment	Jurisdiction	Asset Class
60988	ASIC Trade Activity Submission XML	UAT and Prod	ASIC	Commodity
60988	ASIC Trade Activity Submission XML	UAT and Prod	ASIC	Credit
60988	ASIC Trade Activity Submission XML	UAT and Prod	ASIC	Equity
60988	ASIC Trade Activity Submission XML	UAT and Prod	ASIC	FX
60988	ASIC Trade Activity Submission XML	UAT and Prod	ASIC	Rates
60989	ASIC Margin Activity Submission XML	UAT and Prod	ASIC	Collateral

- Added new DTCC content type 'ISO'. Processing of ISO messages for ASIC rewrite using SFTP is different as compared to the FpML messages. For ASIC rewrite ISO messages, header is not required to be sent to DTCC. To apply different processing for ISO messages, new DTCC content type called ISO is added. For schedule task created for ASIC rewrite reporting, DTCC content type 'ISO' should be selected.