



Nasdaq Calypso

Data Exporter

Version 16.1, 17, and 18

Revision 38.0
January 2025
Approved

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Document History

Revision	Published	Summary of Changes
1.0	April 2017	First edition for Core Calypso version 15.1
2.0	May 2017	Updates for version 5.3.0
3.0	February 2018	Added multiple engine instances and filters
4.0	January 2019	Updated object coverage
5.0	March 2019	Updated enhancement done to the export API for version 2.2.0
6.0	October 2019	Added release notes for version 2.2.1
7.0	December 2019	Added release notes for version 2.2.2, 2.2.3, 2.2.4
8.0	February 2020	Added release notes for version 3.0.0
9.0	April 2020	Added release notes for version 3.1.0
10.0	May 2020	Updated for version 3.2.0
11.0	June 2020	Updated for version 3.3.0, 3.3.1
12.0	July 2020	Updated for version 3.2.1, 3.4.0, 3.4.1
13.0	August 2020	Updated for version 4.0.0.
14.0	September 2020	Updated for version 4.1.0.
15.0	October 2020	Updated for version 4.2.0.
16.0	November 2020	Updated for version 3.3.2, 3.3.3.
17.0	December 2020	Updated for version 4.3.0, 4.2.1

Revision	Published	Summary of Changes
18.0	January 2021	Updated for version 4.4.0.
19.0	March 2021	Updated for version 4.5.0.
20.0	April 2021	Updated for version 4.5.1, 4.6.0.
21.0	May 2021	Updated for version 4.6.1
22.0	June 2021	Updated for version 3.1.1, 3.1.2, 3.1.3, 3.1.4, 4.7.0
23.0	July 2021	Updated for version 4.7.1
24.0	August 2021	Updated for version 4.5.2
25.0	November 2021	Added REST APIs v2.
26.0	February 2022	As of version 17.0, REST APIs documentation is provided under the REST APIs page on the Documentation Portal and under <calypso home>/docs.
27.0	March 2022	Updated for version 16.1 Monthly Release.
28.0	April 2022	Updated for version 16.1 Monthly Release.
29.0	June 2022	Updated for version 16.1 & 17.0 Monthly Release.
30.0	July 2022	Updated for version 17.0 Monthly Release
31.0	August 2022	Updated for version 17.0 Monthly Release
32.0	November 2022	Updated for version 17.0 Monthly Release
33.0	January 2023	Updated for version 17.0 – Added support to extract points on Commodity Spread and Commodity curve.
34.0	July 2023	Updated for version 17.0 – Added support for Extendible Swap
35.0	May 2024	Added support for Precious Metal Deposit Lease (PMDL) product
36.0	August 2024	Added RATE_RESET action for FX: NDF and NDF Swap
37.0	September 2024	Added support for ListedFRA Trades
38.0	January 2025	Added Static/Market Data Objects

Data Exporter is formerly known as Integration Services.

This functionality is an interface that requires a specific license agreement. Please contact your Calypso representative for details.

As of September 2021 (after version 4.7.1), the Data Exporter is no longer an external module, and the release notes are part of the monthly release notes.

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Introduction

This document describes the Calypso Data Exporter Service to export objects from Calypso in Data Uploader XML format.

The Data Exporter provides a framework and the end points, an engine for real-time export and a scheduled task for batch export.

Currently Data Exporter supports the following object types for export.

Trades

Trade Type	Action	Format
ADR	NEW, AMEND, CANCEL	XML
Banking Product	NEW, AMEND, CANCEL	XML
BillingTrade	NEW, AMEND, CANCEL	XML
Bond, BondMM	NEW, AMEND, CANCEL	XML
Bond Asset Backed	NEW, AMEND, CANCEL	XML
Bond Forward	NEW, AMEND, CANCEL, TERMINATE, EXERCISE, ROLLOVER	XML
Cap Floor	NEW, AMEND, CANCEL, TERMINATE, NOVATE, RATE RESET	XML
CDS, CDS Index, CDSNthDefault	NEW, AMEND, CANCEL, TERMINATE, NOVATE	XML, CSV
CDSIndexTranche, CDSIndexOption	NEW, AMEND, CANCEL	XML
ContingentCreditDefaultSwap	NEW, AMEND, CANCEL, TERMINATE	XML
Credit Default Swaption	NEW, AMEND, CANCEL, TERMINATE	XML
CollateralDistributionTrade	NEW, AMEND, CANCEL	XML
CollateralExposure	NEW, AMEND, CANCEL	XML
Colombian	NEW, AMEND, CANCEL	XML
Commodity Forward	NEW, AMEND, CANCEL	XML
CommodityOTCOption	NEW, AMEND, CANCEL	XML
Commodity Spot	NEW, AMEND, CANCEL	XML

Trade Type	Action	Format
Commodity Swap	NEW, AMEND, CANCEL	CSV/XML
Commodity Swaption	NEW, AMEND, CANCEL, EXERCISE, TERMINATE	XML
ContribWithdrawTrade	NEW, AMEND, CANCEL	XML
CoverDistributionTrade	NEW, AMEND, CANCEL	XML
CreditDrawDownTrade	NEW, AMEND, CANCEL	XML
CreditFacilityTrade	NEW, AMEND, CANCEL	XML
CreditTrancheTrade	NEW, AMEND, CANCEL	XML
Curve Seasonality	NEW, AMEND, DELETE	XML, CSV
CustomerTransfer	NEW, AMEND, CANCEL	XML
DeferredPL	NEW, AMEND, CANCEL	XML
Equity	NEW, AMEND, CANCEL	XML
EquityForward	NEW, AMEND, CANCEL	XML
Equity Index	NEW, AMEND, CANCEL	XML
Equity Swap	NEW, AMEND, CANCEL, TERMINATE, NOVATE	XML
Equity Structured Option	NEW, AMEND, CANCEL, TERMINATE, NOVATE, EXERCISE	XML
ETF	NEW, AMEND, CANCEL	XML
ETO	NEW, AMEND, CANCEL	XML
ERS_ADDON		CSV/XML
External Trade	NEW, AMEND, CANCEL	XML
Extendible Swap	NEW, AMEND, TERMINATE, NOVATE, EXERCISE	CSV/XML
FRA	NEW, AMEND, CANCEL, RATE RESET	XML

Trade Type	Action	Format
FutureBond, FutureMM, Future Equity, Future Equity Index, FutureOption	NEW, AMEND, CANCEL	XML
FX Option: Vanilla - European and American, VolFwd, Asian, Lookback, Barrier, Digital, DigitalWithBarrier	NEW, AMEND, CANCEL, NOVATE, EXERCISE	XML
FX: Spot, Forward, NDF, NDF Swap, Swap, Option Forward, Merchant FX, Flexi Forward, AveragingForward	NEW, AMEND, CANCEL	XML
FX: NDF, NDF Swap	NEW, AMEND, CANCEL, RATE RESET	XML
InterestBearing	NEW, AMEND, CANCEL	XML
InvestorTransferTrade	NEW, AMEND, CANCEL	XML
IRS: SwapCrossCurrency, SwapNonDeliverable, XCCySwap, NDS, CancellableSwap, BasisSwap	NEW, AMEND, CANCEL, TERMINATE, NOVATE, RATE RESET	XML
IssuanceTrade	NEW, AMEND, CANCEL	XML
ListedFRA Trade	NEW, AMEND, NOVATE, TERMINATE	XML/CSV
Loan/Deposit	NEW, AMEND, CANCEL, TERMINATE, NOVATE	XML
Loan Trade	NEW, AMEND, CANCEL, ALLOCATE	XML/CSV
Lock Bond	NEW, AMEND, EXERCISE, TERMINATE	XML/CSV
MarginCallTrade	NEW, AMEND, CANCEL	XML
Margin Call Contract		XML
Performance Swap	NEW, AMEND, CANCEL, TERMINATE, PARTIAL TERMINATE, NOVATE, PARTIAL NOVATE	XML
PortfolioSwap	NEW, AMEND, CANCEL	XML
Precious Metal Deposit Lease (PMDL)	NEW, AMEND, CANCEL	XML
RepoTrade	NEW, AMEND, CANCEL, TERMINATE, NOVATE	XML
ScriptableOTC	NEW, AMEND, CANCEL, EXERCISE, KNOCK_IN, KNOCK_OUT, TERMINATE,	XML

Trade Type	Action	Format
	PARTIAL TERMINATE, NOVATE, PARTIAL NOVATE	
SecLendingTrade	NEW, AMEND, CANCEL, TERMINATE, NOVATE	XML
ShareClass	NEW, AMEND, CANCEL	XML
Series	NEW, AMEND, CANCEL	XML
Simple Transfer, SimpleMM	NEW, AMEND, CANCEL	XML
Support SpreadCapFloor	NEW, AMEND, CANCEL, TERMINATE, NOVATE, ALLOCATE	XML
StructuredFlows	NEW, AMEND, CANCEL, TERMINATE, PARTIAL TERMINATE, NOVATE, PARTIAL NOVATE, ROLLOVER, Reconventions	XML
SubscripRedempTrade	NEW, AMEND, CANCEL	XML
Swaption (Vanilla)	NEW, AMEND, TERMINATE, NOVATE, EXERCISE (American, European, Bermudan)	XML
Transfer Agent Config, Transfer Agent Trade	NEW, AMEND, CANCEL	XML/CSV
Treasury Lock	NEW, AMEND, CANCEL	XML
TripartyExposure Trade	NEW, AMEND, CANCEL, TERMINATE	XML
Unitized Fund	NEW, AMEND, CANCEL	XML
Variance Swap	NEW, AMEND, CANCEL, TERMINATE, NOVATE	XML
Warrant	NEW, AMEND, CANCEL	XML
WindowForward	NEW, AMEND, CANCEL	XML

These objects along with their lifecycle events can be exported to a file or as a message to a JMS queue.

Static/Market Data Objects

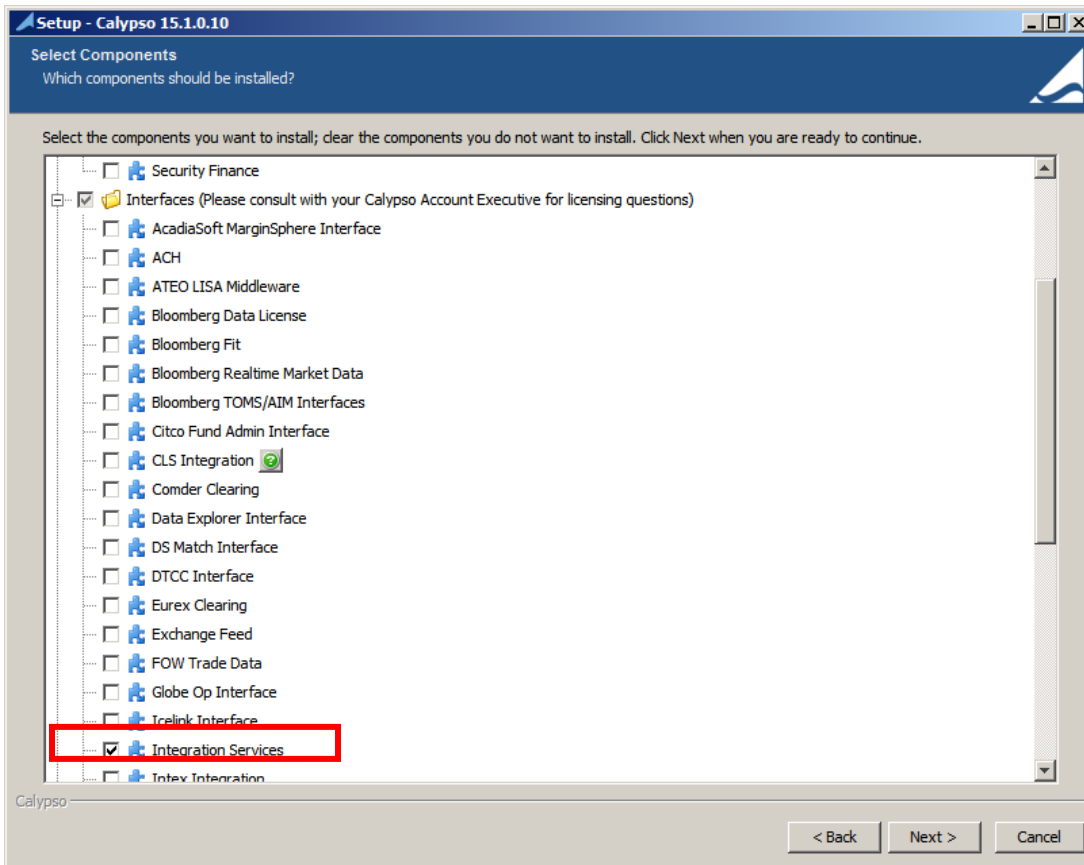
Data Objects
Book
Basket
BOMessage
Countries
MultiQuote
OrderBundle
Order
PortfolioSwapContract
ETF Product
VolSurfaceUnderlyingCDSIndexOption
VolSurfaceUnderlyingQuote
LegalEntity
BankingProduct
EligibilityRule
CurveCommodity
FXVolatilitySurface
NettingMethod

Data Objects

WrongWayRiskGroup

Installation Instructions

The Data Exporter is installed as part of the Calypso Installer when you select the “Integration Services” interface as shown below.



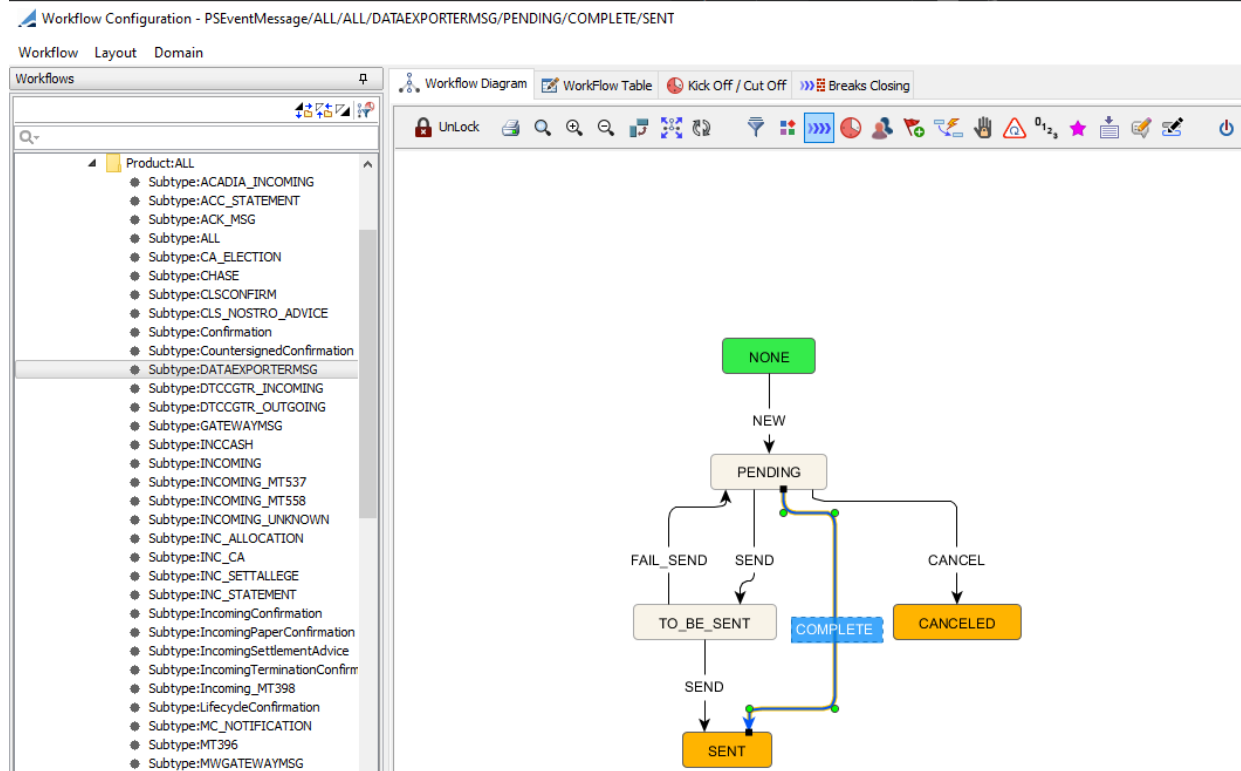
For older versions of Calypso, please raise a request with Product Support.

Database Upgrade

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

2.1 Workflow Setup

The following workflows should be imported: <CALYPSO_HOME>/resources/DATAEXPORTERMSG.wf



2.2 Property File

Go to "<calypso home>/client/resources" and rename the "dataexporter.properties.sample" to "dataexporter.properties".

Edit "dataexporter.properties" and set 'exportType' to export the object as File or as a message on a queue.

Only the following entries in the file should be changed.

```

# supported values are File/JMS
exportType=File

# If exportType=File, then set the 'exportDir'
exportDir=C:\\DataExporter\\

#If exportType=JMS, you need to provide MQ related properties.

#For ActiveMQ

```

```
#jms.url=tcp://localhost:61616
#jms.modetypeclass=org.apache.activemq.jndi.ActiveMQInitialContextFactory
#jms.queue.connectionFactory=ConnectionFactory

persistMessages=Failure
#Valid values None,Failure,All

exportLifecycle=true
```

exportLifecycle

true - After performing TERMINATE/ROLLOVER action on trade, resultant child trade is not exported

false - After performing TERMINATE/ROLLOVER action on trade, resultant child trade is exported

Connection with “binding” File

```
#For IBMMQ
jms.url=file://C:/calypso/mq/JNDI-Directory-LocalMQ
jms.modetypeclass=com.sun.jndi.fscontext.RefFSContextFactory
jms.queue.connectionFactory=JMS_TCP

jms.queue.connectionUserName=calypso
jms.queue.connectionPassword=calypso
output.queue.name=CalypsoToUploader

#jms.queue.hostname=10.0.0.1
#jms.queue.port=1414
#jms.queue.queueManager=QM_CALYPSO
#jms.queue.channel=UPLOADER.DEF.SVRCONN
```

Connection without “binding” File

```
#For IBMMQ
#jms.url=file://localhost/c:/tools/ibm/mqs/binding
#jms.modetypeclass=com.sun.jndi.fscontext.RefFSContextFactory
#jms.queue.connectionFactory=QueueConnectionFactory
#jms.modetypeclass=com.sun.jndi.fscontext.RefFSContextFactory
#jms.queue.connectionFactory=JMS_TCP
```

```
jms.queue.connectionUserName=  
jms.queue.connectionPassword=  
output.queue.name=CalypsoToUploader  
  
jms.queue.hostname=10.0.0.1  
jms.queue.port=1414  
jms.queue.queueManager=QM_CALYPSO  
jms.queue.channel=UPLOADER.DEF.SVRCONN  
messagingPlatform=IBMMQ
```

SSL Support

```
#IBM SSL Support  
sslVersion=TLSv1.2  
sslKeystore=keystore.jks  
sslKeystorePassword=<password>  
sslTrustStore=truststore.jks  
sslTrustStorePassword=<password>  
sslCipherSuite=TLS_RSA_WITH_AES_256_CBC_SHA256
```

You will then need to deploy the file to your applications servers.

► Please refer to the *Calypso Installation Guide* for details.

2.3 DataExportServiceEngine Setup

You need to configure the DataExportServiceEngine as follows using the Engine Configuration window in Web Admin.

The DataExportServiceEngine exports the trades as a File or as a message to a JMS Queue in Uploader XML format.

It needs to subscribe to PSEventTrade and PSEventMessage.

localhost:8140/engineserver/admin/manage/editEngine?engineName=DataExportServiceEngine

Apps Imported From IE HUDSON Internal Site JMS JIRA HANDS ON TECH SACCOR CORDA TOD

Server Metrics Profiler Manage Monitoring Logs

Engine Configuration

Engine Name: DataExportServiceEngine Engine ID: 421017

Engine Class: com.calypso.tk.engine.DataExportServiceEngine

Display Name: DataExportServiceEngine Application Type: EngineServer

Description:

Persisted Event Configuration: PSEventAccountBilling

PSEventMessage: PSEventTrade

Event Filters: AllTransfersKnownEventFilter DataExportServiceEngineEventFilter

Engine Manager Configuration: engineserver Start on Startup: ☐

Max Queue Size: Max Batch Size: Number of Threads:

Event Pool Policy:

Pricing Environment: Save settle position changes:

Configuration attributes

TIMEOUT_RESTART	
USE_BOOK_PRICING_ENV	
VALUATION_TIMES	
VALUATION_TIMEZONES	
VERSION_CHECK	
XFER_CHECK_FIRST	
XFER_NEVER_BV	
XFER_NEXT_EVENT	
XFER_PAST_GENERATION	
XFER_POS_AGGREGATION_NAME	
XFER_PRODUCT_FORCEPAST	
XFER_USE_AUTOMATIC_ACCOUNT	
XFER_USE_MONEYDIFF	
XFER_USE_POS_AGGREGATION_ONLY	
XFER_USE_REVERSE	
config	dataexporter.properties
tcid	

Delete Engine Cancel Save

It is started as part of the Engine server.

The engine creates the BO Message of type DATAPERSISTORMSG for each object that is exported based on the property 'persistMessages' as follows:

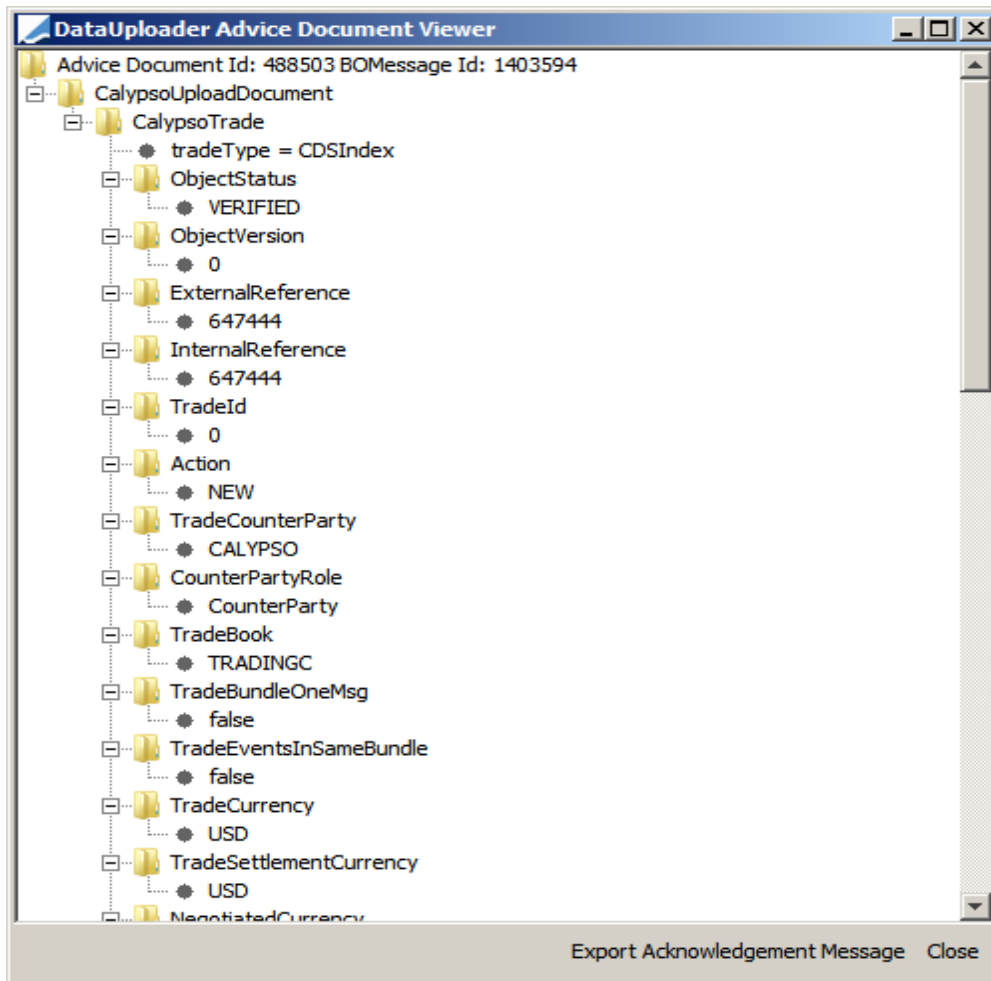
- persistMessages=None – No BO Message is created
- persistMessages=Failure – A BO Message is created only when there is a failure in exporting the object.
- persistMessages=All – A BO message is created for every object exported.

Message Report PE: FromDB (4/25/17 1:13:50 PM) / sap

Report Data View Export Market Data Process Utilities Help

Criteria

MESSAGE_ID	Msg Status	Msg Linked Id	Trade Id	Product Family	Product Type	MESSAGE_TYPE	Trade Product Description	Msg Transfer Id	TEMPLATE_NAI
1403586	SENT	0	644432	Equity		EQUITY.GM		0	
1403587	PENDING	0	645942	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on FANNIE MAE SENIOR_UNSECURED/Pay: USD 5.00000 Maturing on 12/22/2014	0	
1403588	PENDING	0	645943	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on FANNIE MAE SENIOR_UNSECURED/Pay: USD 5.00000 Maturing on 12/22/2014	0	
1403589	PENDING	0	645944	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on FANNIE MAE SENIOR_UNSECURED/Pay: USD 5.00000 Maturing on 12/22/2014	0	
1403590	PENDING	0	645945	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on FANNIE MAE SENIOR_UNSECURED/Pay: USD 5.00000 Maturing on 12/22/2014	0	
1403591	PENDING	0	645946	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on FANNIE MAE SENIOR_UNSECURED/Pay: USD 5.00000 Maturing on 12/22/2014	0	
1403592	PENDING	0	645947	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on FANNIE MAE SENIOR_UNSECURED/Pay: USD 5.00000 Maturing on 12/22/2014	0	
1403593	PENDING	0	645949	Repo		DATAEXPORTERMSG	Repo-(BondOAT 30Y 8.25/30Y/04/25/2022/8.25%)09/14/2016/09/15/2016/4.00000	0	
1403594	SENT	0	647444	CreditDefaultSwap		DATAEXPORTERMSG	Buy Protection on CDX-NAIGHVOL519V1-10Y.Dec.2022	0	



Multiple Instances of DataExportServiceEngine

It is possible to create and run multiple instances of DataExportServiceEngine. As these engine(s) listen to real time events; the same event is received by all the engines. Because of this we end up exporting the same data multiple times. To avoid this duplicate export, we have added the filtering logic support for DataExportService engine. Each export engine can be assigned a different static data filter(s). Based on the filter and its condition, the engine instance will either export the given trade/object or ignore it.

Below are the steps required for configuring the filter(s):

At the time of export, the engine will look for domain "<DataExportEngineName>.Filters".

If domain found, look for the static-data-filter name(s) under it. Get the static-data filter from DB and apply it onto the object. If filter condition is satisfied, the engine accepts and exports the object, else it ignores the object.

If no domain found (<DataExportEngineName>.Filters); that means Engine is eligible to export all objects registered as a part of PersistedEventConfiguration of engine setup.

Example:

Engine 1: DataExportServiceEngine

Engine Configuration

Engine Name: ? DataExportServiceEngine	Engine ID: 421017	Max Queue Size: ? 	Max Batch Size: ? 	Number of Threads: ? 																																
Engine Class: com.calypso.tk.engine.DataExportServiceEngine		Event Pool Policy: ? 																																		
Display Name: ? DataExportServiceEngine	Application Type: EngineServer	Pricing Environment: ? default	Save settle position changes: ? 																																	
Description: DataExportServiceEngine		Configuration attributes																																		
Persisted Event Configuration: PSEventAccountBilling + - PSEventMessage PSEventTrade		<table border="1"> <thead> <tr> <th>Attribute Name</th> <th>Attribute Value</th> </tr> </thead> <tbody> <tr><td>BALANCE_MODE</td><td></td></tr> <tr><td>CLASS_NAME</td><td></td></tr> <tr><td>DISPLAY_NAME</td><td></td></tr> <tr><td>DateType</td><td></td></tr> <tr><td>EVENT_ORDER</td><td></td></tr> <tr><td>EXCLUDE_PRODUCTTYPE</td><td></td></tr> <tr><td>EXCLUDE_STATUS</td><td></td></tr> <tr><td>HANDLE_FUTURE_LIQ_CASH_FLOWS</td><td></td></tr> <tr><td>IGNORE_ACTION</td><td></td></tr> <tr><td>INSTANCE_NAME</td><td></td></tr> <tr><td>INV_MAX_POSITION</td><td></td></tr> <tr><td>LIQUIDATION_TIMEOUT</td><td></td></tr> <tr><td>MAX_TIMER_POSITION</td><td></td></tr> <tr><td>MCC_DATE_KEYWORD</td><td></td></tr> <tr><td>MCC_FEED_NAME</td><td></td></tr> </tbody> </table>			Attribute Name	Attribute Value	BALANCE_MODE		CLASS_NAME		DISPLAY_NAME		DateType		EVENT_ORDER		EXCLUDE_PRODUCTTYPE		EXCLUDE_STATUS		HANDLE_FUTURE_LIQ_CASH_FLOWS		IGNORE_ACTION		INSTANCE_NAME		INV_MAX_POSITION		LIQUIDATION_TIMEOUT		MAX_TIMER_POSITION		MCC_DATE_KEYWORD		MCC_FEED_NAME	
Attribute Name	Attribute Value																																			
BALANCE_MODE																																				
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DISPLAY_NAME																																				
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EXCLUDE_PRODUCTTYPE																																				
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HANDLE_FUTURE_LIQ_CASH_FLOWS																																				
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INV_MAX_POSITION																																				
LIQUIDATION_TIMEOUT																																				
MAX_TIMER_POSITION																																				
MCC_DATE_KEYWORD																																				
MCC_FEED_NAME																																				
Event Filters: AllTransfersKnownEventFilter + - DataExportServiceEngineEventFilter																																				
Engine Manager Configuration: engineserver		Start on Startup: ☐																																		
Delete Engine		Cancel Save																																		

Domain Value:

DataExportServiceEngine 1 of 2 Value cvaExposureBookName DataExportServiceEngine.Filters Bond_LA Trade_Is_Sell DataExportServiceEngineFA.Filters DataPersistorBOMessageIncompleteStates dataSegregationEnabledApps DateRuleReportTemplate

StaticDataFilter: Bond_LA

 Static Data Filter Window [152015/CORE-INTERFACES/]

Name

External Ref.

Comment

Groups

 Criteria...

Attribute	Criteria		Filter Value(s)
Product Type	IN	Add	Bond

StaticDataFilter: Trade_Is_Sell

 Static Data Filter Window [152015/CORE-INTERFACES/]

Name

External Ref.

Comment

Groups

 Criteria...

Attribute	Criteria		Filter Value(s)
Buy/Sell	IN	Add	Sell

Export of Changes to Static Data

The DataExportServiceEngine processes PSEventDomainChange events by default and exports the corresponding static data changes.

You can add the static data that you do not want to export to the domain "<engineName>.excludedStaticData".

Example: Domain "DataExportServiceEngine.excludedStaticData".

Value = LEGAL_ENTITY to exclude legal entities changes from the export.

Value = BOOK to exclude books changes from the export.

2.4 DATA_EXPORTER Scheduled Task

The scheduled task takes a trade filter as input and exports the trades as File in the location specified by 'Export Folder' in Data Uploader format.

Task Attributes	
Export Type	File
Export Folder	C:\DataExporter\
Export File name	DATAEXP_IRDTrades_
Number of Trades per file	15000
Export Lifecycle	n
External Reference Prefix	AB_IRD_
Timestamp FileName	false
Timestamp Format	

Task Attributes

Export Type – This is set to File.

Export Folder - Path to store the output file.

Export File Name – File name.

Number of Trades per File -

Export Lifecycle - If y, the trade action is exported. If n, the action in the exported file is set to NEW.

External Reference Prefix - Prefix to the external reference in the exported file, if set. If the trade external reference is empty, the external reference in the exported file is set to <prefix> + <trade ID>.

If the domain "DataExporterBlankReferences" contains Value = true, the Internal Reference and External Reference are blank in the exported file.

Timestamp FileName - true to include a timestamp in the output file name, or false otherwise.

Timestamp Format – Date format of the timestamp if Timestamp FileName = true.

You can filter out the trade(s) using static data-filters as explained above in the DataExportServiceEngine Setup section.

2.5 PFS_CONTRACT_EXPORT Scheduled Task

The scheduled task allows exporting Portfolio Swap Contracts.

Task Attributes	
CONTRACT STATUS	Active
EXPORT LIFECYCLE	FALSE
OUTPUT FILE TYPE	XML
OUTPUT FILE LOCATION	C:/DataExp/PFSOutputFile
OUTPUT FILE NAME	TEST_OUTPUT_PFS.xml
OUTPUT FILE NAME DATE FORMAT	yyyyMMdd hhmmss
INCLUDE TIMESTAMP	TRUE

Task Attributes

CONTRACT STATUS – Active, Inactive or All

EXPORT LIFECYCLE - If TRUE, the latest contract action is exported. If FALSE, the action in the exported file is set to NEW.

OUTPUT FILE TYPE – CSV or XML.

OUTPUT FILE LOCATION - Path to store the output file.

OUTPUT FILE NAME – File name.

OUTPUT FILE NAME DATE FORMAT – Date format for the output file name if INCLUDE TIMESTAMP = TRUE.

INCLUDE TIMESTAMP – TRUE to include a timestamp in the output file name, or FALSE otherwise.

2.6 MARGIN_CALL_CONTRACT_EXPORT Scheduled Task

The scheduled task allows exporting Margin Call Contracts.

Task Attributes	
Collateral Policy	ALL
Role	ALL
Legal Entity	ALL
Contract Type	ALL
Status	ALL
Contract Id	
Export Lifecycle	Y
Output File Location	C:\DataExporter
Output File Name	Export_
Output File Type	XML
Include Timestamp	TRUE
Output File Name Date Format	

Task Attributes

Collateral Policy – Select a collateral policy or ALL.

Role – Select a role or ALL.

Legal Entity – Select a legal entity or ALL.

Contract Type – Select a contract type of ALL.

Status – Select a status or ALL

Contract Id - Enter a Contract Id or leave blank for all.

Export Lifecycle - If TRUE, the latest contract action is exported. If FALSE, the action in the exported file is set to NEW.

Output File Location - Path to store the output file.

Output File Name – File name.

Output File Type – CSV or XML.

Include Timestamp – TRUE to include a timestamp in the output file name, or FALSE otherwise.

Output File Name Date Format - Date format for the output file name if INCLUDE_TIMESTAMP = TRUE.

2.7 ERS_ADDON Scheduled Task

The scheduled task allows exporting the ERS_ADDON table.

Task Attributes	
Output File Location	C:\calypso\AMExport\Addon
Output File Name	CalypsoERSAddon_Export
Output File Type	CSV
Include Timestamp	TRUE
Output File Name Date Format	ddmmyyyy

Task Attributes

Output File Location - Path to store the output file.

Output File Name – File name.

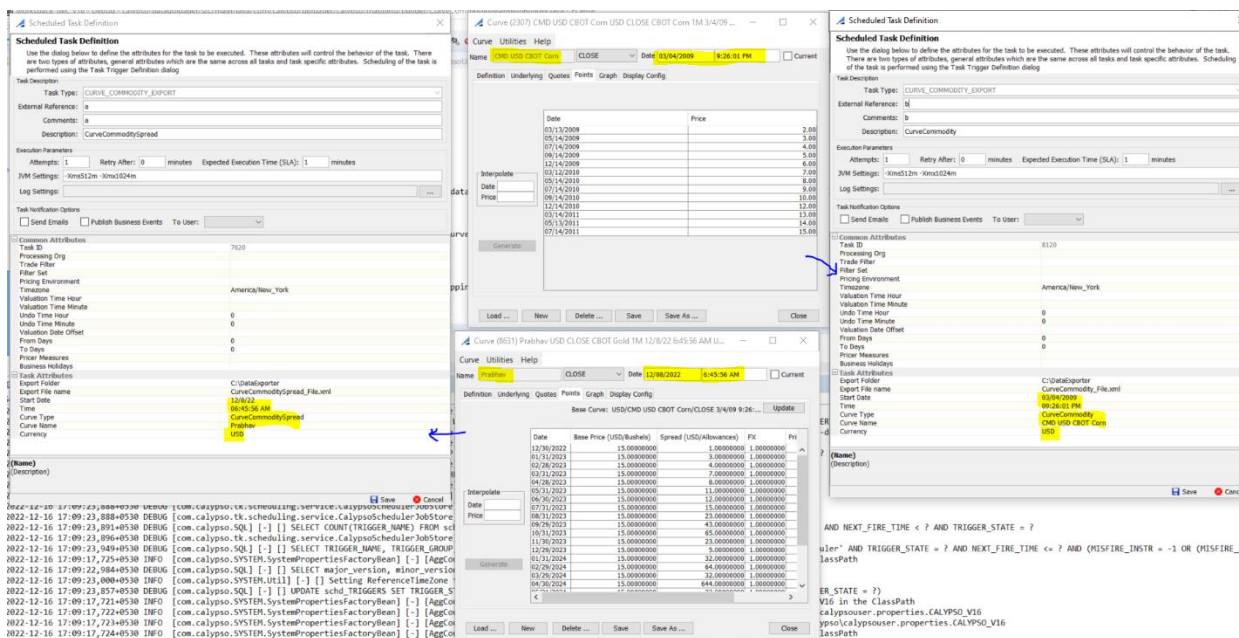
Output File Type – CSV or XML.

Include Timestamp – TRUE to include a timestamp in the output file name, or FALSE otherwise.

Output File Name Date Format - Date format for the output file name if INCLUDE_TIMESTAMP = TRUE.

2.8 CURVE_COMMODITY_EXPORT Scheduled Task

The scheduled task allows to extract the points on Commodity Spread and Commodity curve:



The following Task Attribute table allows to extract the points:

Task Attributes	
Export Folder	C:\DataExporter
Export File name	CurveCommoditySpread_File_2.xml
Start Date	12/01/2022
Time	8:00:00 PM
Curve Type	CurveCommodity
Curve Name	CMD_APL_1076_2
Currency	USD

Task Attributes

Export Folder - Path to store the output file.

Export File Name – File name.

Start Date – The start date of the curve

Time – The time at which the points were extracted.

Curve Type – Is it Commodity Curve or Commodity Spread.

Curve Name – The name of the extracted curve.

Currency – Currency in which the curve is extracted.

2.9 Web Services

The Data Exporter supports web services (RESTful API).

As of version 17.0, REST APIs documentation is provided under the REST APIs page on the Documentation Portal and under `<calypso home>/docs`.

In version 15.2, the web-services are deployed into the Engine server.

In version 16.1.0.55 onwards, the web-services are deployed into the calypsoServices. You can start the calypsoServices server using calypsoServices.bat/.sh.

As of 16.1.0.65, it is deployed into the calypsoServicesInterfacesMs. You can start the calypsoServicesInterfacesMs server using calypsoServicesInterfacesMs.bat/.sh.

Below are the paths to the APIs.

15.2 - Base URL = `http://<host>:<port>/engineserver/services/`

v1 – From 16.1.0.55 - Base URL = `http://<host>:<port>/datauploader-service/services/`

Example: `http://localhost:8080/datauploader-service/services/integration/api/v1/trades?productType=Bond`

v2 – From 16.1.0.94 - Base URL = `http://<host>:<port>/datauploader-service/`

Example: `http://localhost:8080/datauploader-service/integration/api/v2/trades?productType=Bond`

For the JSON format, you need to provide `Accept: application/json` in the request header.

HTTP Method	URL
GET	<code><Base URL>integration/api/v1/trades/id/{tradeId}</code> Output Format = XML/JSON
GET	<code><Base URL>integration/api/v1/trades/external-reference/{externalReference}</code> Output Format = XML/JSON
GET	<code><Base URL>integration/api/v1/trades/internal-reference/{internalReference}</code> Output Format = XML/JSON
GET	<code><Base URL>integration/api/v1/trades?{filter criteria}</code> The following filter criteria can be used (separated by &): attributeName, attributeValue, legalEntityRole Retrieves all the trades on the legal entity attribute name and value passed and the role is used to identify the relation between the legal entity and the trade. Role can be either CounterParty or ProcessingOrg. Example: <code>trades?attributeName=ACC&attributeValue=test_acc&legalEntityRole=CounterParty</code> productType Retrieves all the trades that belong to the product type passed. This is multivalued parameter. We can pass multiple values as comma separated. Example: <code>trades?productType=Swap,Bond</code> fromCCY (Primary Currency), toCCY (Secondary Currency) Retrieves trade by currency pair. Example: <code>trades?fromCCY=EUR&toCCY=USD</code> minAmount, maxAmount Retrieves trades with Quantity between the min and max amount. Example: <code>trades?minAmount=10000&maxAmount=1000000</code> startDate, endDate (Date format is yyyy-mm-dd) Retrieves trades with trade date between startDate and endDate.

HTTP Method	URL
	These parameters work in conjunction. The query will fail if only 1 of these parameters is provided. Example: trades?startDate=2013-03-13&endDate=2020-04-08 tradeCurrency This parameter will return trades whose Trade Currency matches with the value specified. keywordName, keywordValue Retrieves all the trades based on passed trade keyword name and trade keyword value. Example: trades?keywordName=Source&keywordValue=DTUP page This parameter should be used to retrieve trades based on page number Default value is 1 i.e. first page. pageSize This parameter specifies the number of trades to be fetched in a page. sortBy This parameter allows sorting the results by tradeid or tradedate. Default is tradedate. Example: trades?productType=Swap,Bond&sortBy=tradeId sortType This parameter allows setting the sort order: "asc" (Ascending) or "desc" (Descending). Default is desc. Example: trades?productType=Swap,Bond&sortBy=tradeId&sortType=desc lifeCycle This parameter allows exporting child trades generated after termination, rollover, etc. when set to false. Default is true, child trades are not exported. Example: trades?productType=Swap,Bond&sortBy=tradeId&lifeCycle=true externalReferencePrefix This parameter allows adding a prefix to the external reference of exported trades. Example: trades?productType=Swap,Bond&sortBy=tradeId&externalReferencePrefix=Result Output Format = CalypsoUploadDocument Meta data info given as response header – Example: pageSize: 100 page: 3 hasPages: true

HTTP Method	URL
	totalTrades: 1654 errorTrades: [123334,23345] (any trade that satisfies the filter criteria, but is unable to export, is shown in this property)
GET	integration/api/v1/messages?{filter criteria} The following filter criteria are used (separated by &): messages?tradeId=341979,341955&messageType=CONFIRM&receiverContactType=Default  [NOTE: tradeId, messageType and receiverContactType are mandatory.] • tradeId – Trade id (mandatory) – Multiple trade ids can be specified Example: tradeId=341979,341955 • messageType – Message type (mandatory) – Only one message type Example: messageType=CONFIRM • receiverContactType – Receiver contact type (mandatory) – Only one receiver contact type Example: receiverContactType=Default • messageStatus – Message status (optional) – Multiple status codes can be specified Example: messageStatus=TO_BE_SENT,CONFIRMED Output Format = CalypsoUploadDocument Meta data info given as response header – Example: totalBOMessages: 2 errorBOMessages: 1

Release Notes

As of September 2021 (after version 4.7.1), the Data Exporter is no longer an external module, and the release notes are part of the monthly release notes.

3.1 Version 2.2.1

Version	Component	HelpDesk	Issue	Type	Description
2.2.1	CIS		CIS-91	Issue	Issue – Handle out of memory error when large number of trades are exported and improve performance.
2.2.1	CIS		CIS-89	Enh	Issue – Add support for Order Exporter. Fix – Added support for Order events.
2.2.1	CIS		CIS-72	Issue	Issue - SQL Binding Implementation.

3.2 Version 2.2.2, 2.2.3, 2.2.4

Version	Component	HelpDesk	Issue	Type	Description
2.2.2	CIS	189951	CIS-101	Issue	Issue – Scheduled task DATA_EXPORTER exports incomplete trade set.
2.2.3	CIS	189959	CIS-98	Enh	Issue - Exported trade action should be taken from the scheduled task's attribute. Fix – Added scheduled task attribute "Export Lifecycle". If "y", the trade action is exported. If "n", the trade action in the exported file is set to NEW. Added attribute "External Reference Prefix". Prefix to the external reference in the exported file, if set. If the trade external reference is empty, the external reference in the exported file is set to <prefix> + <trade ID>.
2.2.4	CIS		CIS-106	Enh	Issue - Extend exporter coverage to Legal Entities and Books.

3.3 Version 3.0.0

Version	Component	HelpDesk	Issue	Type	Description
3.0.0	CIS	189951	CIS-101	Enh	Issue – Compatibility with Dozer library version 6.5.0.

3.4 Version 3.1.0

Component	HelpDesk	Issue	Type	Description
Int Serv 3.1.0		CIS-130	Enh	Issue – Add support for Multi Quote Mapping.
Int Serv 3.1.0	189951	CIS-100	Issue	Issue – Scheduled task DATA_EXPORTER exports incomplete trade set.
Int Serv 3.1.0	189959	CIS-97	Enh	Issue - Exported trade action should be taken from the scheduled task's attribute. Fix – Added scheduled task attribute "Export Lifecycle". If "y", the trade action is exported. If "n", the trade action in the exported file is set to NEW. Added attribute "External Reference Prefix". Prefix to the external reference in the exported file, if set. If the trade external reference is empty, the external reference in the exported file is set to <prefix> + <trade ID>.
Int Serv 3.1.0		CIS-87	Issue	Issue – Handle out of memory error when large number of trades are exported and improve performance.
Int Serv 3.1.0		CIS-115	Enh	Issue – Add web service for exporting Trade data based on trade criteria. Fix – Added web service for exporting Trade data based on trade criteria – See above for details.

3.5 Version 3.1.1, 3.1.2, 3.1.3, 3.1.4

 Important Note - You need to update the property file dataexporter.properties – See issue CIS-253 below for details.

Component	HD/Case	Issue	Type	Description
Int Serv 3.1.4	00005852 00001862 00012678	CIS-227	Enh	Issue – Add ability for the Data Export Service engine to prevent exporting certain static data when processing a PSEventDomainChange event. Fix – Added domain “<engineName>.excludedStaticData” – You can add the static data that you do not want to export to this domain. Example: Domain “DataExportServiceEngine.excludedStaticData”. Value = LEGAL_ENTITY to exclude legal entities changes from the export. Value = BOOK to exclude books changes from the export.
Int Serv 3.1.4	00004703 00012678	CIS-226	Issue	Issue – Data Exporter performance issue. Fix - Connect to IBM MQ only once, without using “binding” file. The following properties need to be set in dataexporter.properties to connect without using the “binding” file: <pre>jms.queue.hostname=10.0.0.1 jms.queue.port=1414 jms.queue.queueManager=QM_CALYPSO jms.queue.channel=UPLOADER.DEF.SVRCONN messagingPlatform=IBMMQ</pre> Please see Property File for complete details.
Int Serv 3.1.4		CIS-238	Issue	Issue – Stop sending blank data to MQ due to a missing check. Impact Analysis – Local impact to AbstractDataExporter.
Int Serv 3.1.4	00015257	CIS-253	Issue	Issue – When applying termination to an FX Forward trade, an XML file is missing for the FX Swap trade. Fix – The property “Export Lifecycle” in dataexporter.properties has been renamed “exportLifecycle”. Please make sure to update the property file as below to properly export the termination. <pre>exportLifecycle=true</pre>

3.6 Version 3.2.0

Component	HelpDesk	Issue	Type	Description
Int Serv 3.2.0	189950	CIS-137	Enh	Issue – Add support for Portfolio Swap Contracts export. Fix – Added scheduled task PFS_CONTRACT_EXPORT. See above for details.
Int Serv 3.2.0		CIS-135	Enh	Issue – Add support for Banking Product export.
Int Serv 3.2.0		CIS-117	Issue	Issue – Error when calling the exporter API.
Int Serv 3.2.0		CIS-105	Enh	Issue - Extend exporter coverage to Legal Entities and Books.

3.7 Version 3.3.0, 3.3.1

Component	HelpDesk	Issue	Type	Description
Int Serv 3.3.1		CIS-140	Enh	Issue – Add support for Legal Agreement eligibility rules.
Int Serv 3.3.1		CIS-146	Issue	Issue - PFS_CONTRACT_EXPORT scheduled task should not validate output file directory upon saving.
Int Serv 3.3.1		CIS-142	Enh	Issue – Add support to retrieve messages through REST API with different parameters. Fix – Added ability to retrieve messages through REST API by messageType, receiverContactType, messageStatus.

3.8 Version 3.2.1

Component	HelpDesk	Issue	Type	Description
Int Serv 3.2.1		CIS-154	Issue	Issue - PFS_CONTRACT_EXPORT scheduled task should not validate output file directory upon saving.

3.9 Version 3.4.0, 3.4.1

Component	HelpDesk	Issue	Type	Description
Int Serv 3.4.1		CIS-153	Issue	Issue - When adding "External Reference Prefix" in scheduled task DATA_EXPORTER, the external reference is incorrect in the output files.
Int Serv 3.4.1		CIS-149	Enh	Issue – Remove auto subscription of events for DataExportServiceEngine. Fix – The subscription to PSEventTrade and PSEventMessage has to be explicitly specified in the Engine Configuration.
Int Serv 3.4.1		CIS-147	Issue	Issue - PFS_CONTRACT_EXPORT scheduled task should not validate output file directory upon saving.

3.10 Version 4.0.0

Upgrade Note

The REST end points have been moved from the Engine Server to the Calypso Services. The Web Services Base URL has changed as a result.

Component	HelpDesk	Issue	Type	Description
Int Serv 4.0.0		CIS-163	Enh	Issue – Add support for Trade Keyword search criteria for trades REST API. Fix – You can now use a trade keyword as search criteria as in the example below: trades?keywordName=Source&keywordValue=DTUP
Int Serv 4.0.0		CIS-160	Enh	Issue – Move the REST end points from the Engine Server to the Calypso Services. Fix – The REST end points have been moved from the Engine Server to the Calypso Services. The Web Services Base URL has changed from http://<host>:<port>/engineserver/services/ to http://<host>:<port>/datauploader-service/services/. The calypsoServices server must be running.

3.11 Version 4.1.0

Component	HelpDesk	Issue	Type	Description
Int Serv 4.1.0		CIS-173	Issue	Issue – Scheduled task PFS_CONTRACT_EXPORT does not sort the results. Impact Analysis - The results are now sorted by Portfolio Swap Contract ID.
Int Serv 4.1.0		CIS-170	Enh	Issue - Support export of Volatility Surface Underlying for CDS Index Options.

3.12 Version 4.2.0

Component	HelpDesk	Issue	Type	Description
Int Serv 4.2.0	00004905	CIS-189	Enh	Issue – Add SSL support for IBM MQ used by Data Exporter engine. Fix – The following properties need to be set in dataexporter.properties to use SSL: <pre>sslVersion=TLSv1.2 sslKeystore=keystore.jks sslKeystorePassword=<password> sslTrustStore=truststore.jks sslTrustStorePassword=<password> sslCipherSuite=TLS_RSA_WITH_AES_256_CBC_SHA256</pre> Please see Property File for complete details.
Int Serv 4.2.0	00004703 00012678	CIS-186	Issue	Issue – Data Exporter performance issue. Fix - Connect to IBM MQ only once, without using “binding” file. The following properties need to be set in dataexporter.properties to connect without using the “binding” file: <pre>jms.queue.hostname=10.0.0.1 jms.queue.port=1414 jms.queue.queueManager=QM_CALYPSO jms.queue.channel=UPLOADER.DEF.SVRCONN messagingPlatform=IBMMQ</pre> Please see Property File for complete details.

Component	HelpDesk	Issue	Type	Description
Int Serv 4.2.0	00003883	CIS-181	Issue	Issue – Some messages are lost when using multi-threading.

3.13 Version 3.3.2, 3.3.3

Component	HD/Case	Issue	Type	Description
Int Serv 3.3.3	00004703	CIS-185	Issue	Issue – Data Exporter performance issue. Fix - Connect to IBM MQ only once, without using “binding” file. The following properties need to be set in dataexporter.properties to connect without using the “binding” file: <pre>jms.queue.hostname=10.0.0.1 jms.queue.port=1414 jms.queue.queueManager=QM_CALYPSO jms.queue.channel=UPLOADER.DEF.SVRCONN messagingPlatform=IBMMQ</pre> Please see Property File for complete details.
Int Serv 3.3.3	00003883	CIS-180	Issue	Issue – Some messages are lost when using multi-threading.
Int Serv 3.3.3	00005852 00001862	CIS-197	Enh	Issue – Add ability for the Data Export Service engine to prevent exporting certain static data when processing a PSEventDomainChange event. Fix – Added domain “<engineName>.excludedStaticData” – You can add the static data that you do not want to export to this domain. Example: Domain “DataExportServiceEngine.excludedStaticData”. Value = LEGAL_ENTITY to exclude legal entities changes from the export. Value = BOOK to exclude books changes from the export.

3.14 Version 4.3.0

Component	HD/Case	Issue	Type	Description
Int Serv 4.3.0		CIS-204	Issue	Issue – Book and LE export is incorrect in case of AMEND.
Int Serv 4.3.0	00005852 00001862	CIS-196	Enh	Issue – Add ability for the Data Export Service engine to prevent exporting certain static data when processing a PSEventDomainChange event. Fix – Added domain “<engineName>.excludedStaticData” – You can add the static data that you do not want to export to this domain. Example: Domain “DataExportServiceEngine.excludedStaticData”. Value = LEGAL_ENTITY to exclude legal entities changes from the export. Value = BOOK to exclude books changes from the export.
Int Serv 4.3.0		CIS-88	Enh	Issue - Upgrade httpcore library to version 4.4.13.

3.15 Version 4.2.1

Component	HD/Case	Issue	Type	Description
Int Serv 4.2.1	00005852 00001862 00012678	CIS-213	Enh	Issue – Add ability for the Data Export Service engine to prevent exporting certain static data when processing a PSEventDomainChange event. Fix – Added domain “<engineName>.excludedStaticData” – You can add the static data that you do not want to export to this domain. Example: Domain “DataExportServiceEngine.excludedStaticData”. Value = LEGAL_ENTITY to exclude legal entities changes from the export. Value = BOOK to exclude books changes from the export.

3.16 Version 4.4.0

Component	HD/Case	Issue	Type	Description
Int Serv 4.4.0		CIS-217	Issue	Issue – Duplicate XML files are created for an exported Swaption.
Int Serv 4.4.0		CIS-212	Issue	Issue - Scheduled task "DATA_EXPORTER" exports the same data in different rows as there is no sorting. Fix - Trades are now sorted based on the trade id in an ascending manner.
Int Serv 4.4.0		CIS-208	Issue	Issue - Amendment of Portfolio Swap contract is exported as NEW instead of AMEND due to a cache issue.

3.17 Version 4.5.0

Component	HD/Case	Issue	Type	Description
Int Service 4.5.0		CIS-222	Enh	Issue – Data Exporter – Add support for Margin Call Contract export.

3.18 Version 4.5.1

Component	HD/Case	Issue	Type	Description
Int Service 4.5.1	00011392	CIS-234	Enh	Issue – Multiple enhancements to Data Exporter API. Fix – Added ability to fetch trades with multiple trade keywords and values. Example: trades?keyword.ROUNDING=NEAREST &keyword.PSStrategyName=Asian Added ability to tech trades with multiple trade status codes (comma separated). Example: trades?status=MO_REVIEW,PENDING In case no records are found, the response is error message 200.

3.19 Version 4.5.2

Component	HD/Case	RPM	Issue	Type	Description
Int Service 4.5.2	00019475	RPM-6248	CIS-267	Enh	Issue – Add ability to export margin call contracts in bulk. Fix – Added scheduled task MARGIN_CALL_CONTRACT_EXPORT to export contracts in XML and CSV format.

3.20 Version 4.6.0

Component	HD/Case	Issue	Type	Description
Int Service 4.6.0	00011392	CIS-233	Enh	Issue – Multiple enhancements to Data Exporter API. Fix – Added ability to fetch trades with multiple trade keywords and values. Example: trades?keyword.ROUNDING=NEAREST &keyword.PSStrategyName=Asian Added ability to tech trades with multiple trade status codes (comma separated). Example: trades?status=MO_REVIEW,PENDING In case no records are found, the response is error message 200.

3.21 Version 4.6.1

Important Note

You need to update the property file dataexporter.properties – See issue CIS-250 below for details.

Component	HD/Case	RPM	Issue	Type	Description
Int Service 4.6.1	00015257		CIS-250	Issue	Issue – When applying termination to an FX Forward trade, an XML file is missing for the FX Swap trade. Fix – The property “Export Lifecycle” in dataexporter.properties has been renamed “exportLifecycle”. Please make sure to update

Component	HD/Case	RPM	Issue	Type	Description
					the property file as below to properly export the termination. exportLifecycle=true
Int Service 4.6.1		RPM- 3679	CIS-249	Enh	Issue – Add support for Scriptable OTC products lifecycle actions. Fix – Added support for EXERCISE, KNOCK_IN, KNOCK_OUT, TERMINATE, PARTIAL TERMINATE, NOVATE, PARTIAL NOVATE.

3.22 Version 4.7.0

Component	HD/Case	RPM	Issue	Type	Description
Int Service 4.7.0		RPM- 5043	CIS-244	Enh	Issue – Security - Upgrade library com.fasterxml.jackson.core:Jackson* to version 2.11.4.

3.23 Version 4.7.1

Component	HD/Case	RPM	Issue	Type	Description
Int Service 4.7.1			CIS-241	Issue	Issue – Stop sending blank data to MQ due to a missing check. Impact Analysis – Local impact to AbstractDataExporter.