



Nasdaq Calypso

Eurex ETD Integration Guide

Version 3.11.0

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Approved

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Document History

Revision	Published	Summary of Changes
1.0	April 2021	First revision for version 1.0.2
2.0	May 2021	Updates for version 1.0.3
3.0	July 2021	Updates for version 1.0.4, 1.0.5 – Added Timezone and ElectronicExchangeTicker mapping
4.0	August 2021	Updates for version 1.1.0
5.0	October 2021	Version 1.2.0 is a technical release only.
6.0	December 2021	Version 1.3.0 is a technical release only.
7.0	January 2022	Version 2.0.0, 2.0.1 - Technical release only – Version 17.0 compatibility
8.0	February 2022	Version 2.1.0 – Technical release only – Code review
9.0	March 2022	Version 1.4.0, 2.2.0
10.0	April 2022	Version 2.3.0, 1.5.0
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12.0	June 2022	Version 1.3.2, 1.3.3, 1.3.4
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20.0	January 2024	Version 3.4.0 (compatibility with version 18)
21.0	February 2024	Version 2.11.0
22.0	March 2024	Version 3.5.0
23.0	April 2024	Version 2.12.0
24.0	May 2024	Version 3.6.0, 2.13.0
25.0	July 2024	Version 2.14.0, 3.7.0 – Added mapping for “snt” field format.
26.0	August 2024	Version 2.14.1, 2.15.0 – Release notes only Added Member Id configuration details.
27.0	September 2024	Version 3.8.0, 2.16.0
28.0	October 2024	Version 2.17.0, 3.9.0 – Release notes only
29.0	November 2024	Version 2.10.1 – Release notes only
30.0	January 2025	Version 2.18.0, 3.10.0
31.0	March 2025	Version 3.11.0 – Release notes only

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Overview

The Eurex ETD interface allows connecting to Eurex fixml account and capture live ETD clearing trades from Eurex exchange.

Eurex sends trade details in fixml syntax file format through various queues to Calypso with support of jks and third-party JAR files.

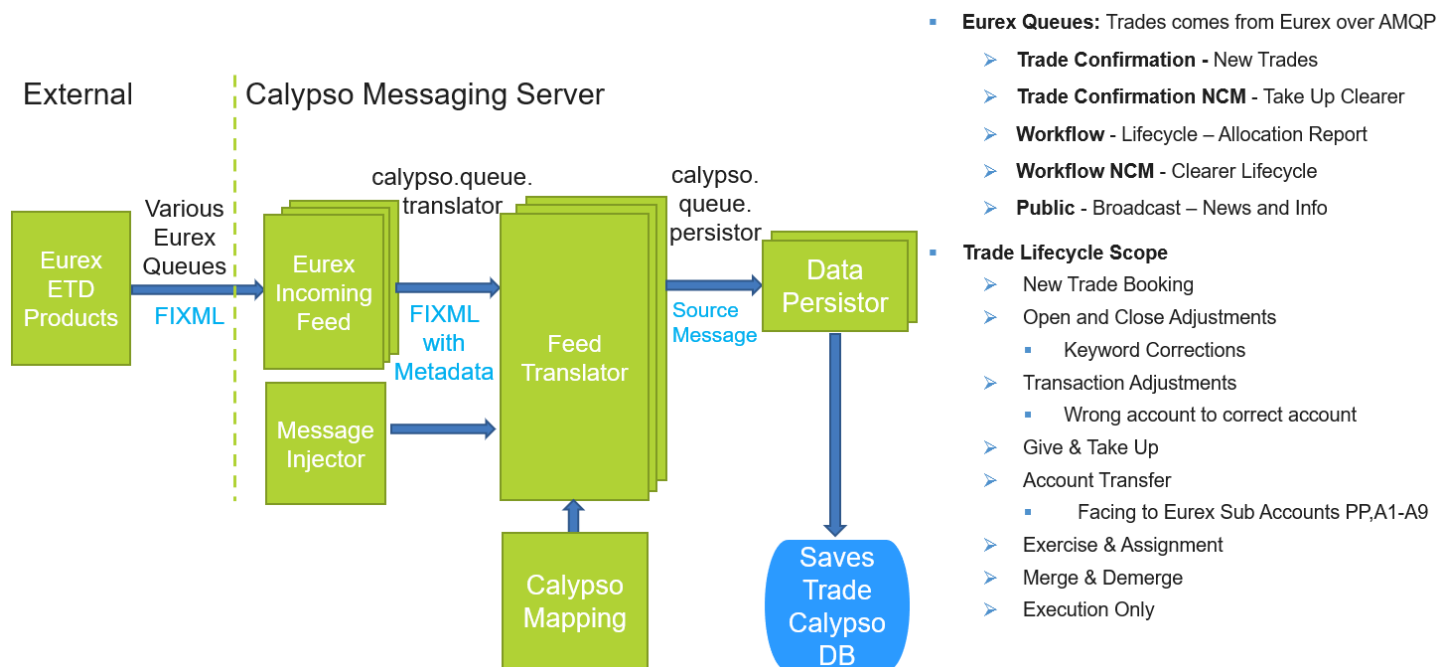
FCM Trade interface is enhanced with new features to support this new module which will now read ETD Eurex fixml syntax and convert into calypso uploader format.

The purpose of this interface is to integrate the ETD incoming message from the FIXML based file, translate to Uploader XML format, and save the trade using the Data Uploader FCM Trade Interface framework.

1.1 Dependencies

The Eurex ETD Interface Module is dependent on the Calypso Data Uploader with FCM Trade Interface framework and Calypso Clearing Member Module.

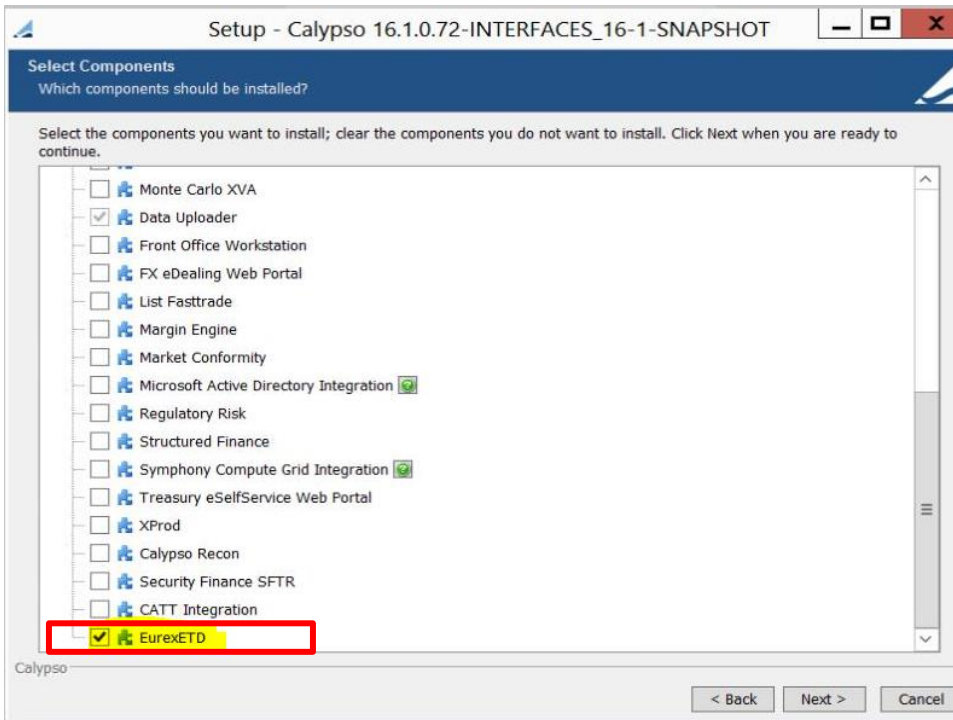
1.2 Eurex ETD Data Flow



Installation

2.1 Software Installation

The Eurex ETD module is installed as part of the Calypso Installer when you select the “Eurex ETD” interface:



► Please refer to the Calypso Installation Guide for complete details on the Calypso Installer.

2.1.1 Third-Party Libraries - Version 2.8.2 and below

Make sure that you add the following third-party Jar files to your installation under <calypso home>/client/lib.

Apache Camel JAR

Name	Date modified	Type	Size
 camel-activemq-3.4.2.jar	3/9/2021 5:50 PM	Executable Jar File	50 KB
 camel-amqp-3.4.2.jar	2/23/2021 4:07 PM	Executable Jar File	42 KB
 camel-api-3.4.2.jar	3/9/2021 5:50 PM	Executable Jar File	399 KB
 camel-attachments-3.4.2.jar	3/9/2021 5:50 PM	Executable Jar File	19 KB
 camel-base-3.4.2.jar	3/9/2021 5:50 PM	Executable Jar File	985 KB

Qpid AMQP Jars

 optional	3/10/2021 8:31 PM	File folder	
 geronimo-jms_2.0_spec-1.0-alpha-2.jar	1/22/2020 8:40 PM	Executable Jar File	47 KB
 netty-buffer-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	293 KB
 netty-codec-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	313 KB
 netty-codec-http-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	609 KB
 netty-common-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	633 KB
 netty-handler-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	466 KB
 netty-resolver-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	33 KB
 netty-transport-4.1.55.Final.jar	1/22/2020 8:40 PM	Executable Jar File	467 KB
 netty-transport-native-epoll-4.1.55.Final...	1/22/2020 8:40 PM	Executable Jar File	150 KB
 netty-transport-native-kqueue-4.1.55.Fin...	1/22/2020 8:40 PM	Executable Jar File	110 KB
 netty-transport-native-unix-common-4....	1/22/2020 8:40 PM	Executable Jar File	34 KB
 proton-j-0.33.8.jar	1/22/2020 8:40 PM	Executable Jar File	726 KB
 qpid-jms-client-0.56.0.jar	1/22/2020 8:40 PM	Executable Jar File	783 KB
 qpid-jms-discovery-0.56.0.jar	1/22/2020 8:40 PM	Executable Jar File	40 KB
 slf4j-api-1.7.30.jar	1/22/2020 8:40 PM	Executable Jar File	41 KB

Netty Jars

Name
 netty-buffer-4.1.48.Final.jar
 netty-codec-4.1.48.Final.jar
 netty-codec-http-4.1.48.Final.jar
 netty-common-4.1.48.Final.jar
 netty-handler-4.1.48.Final.jar
 netty-resolver-4.1.48.Final.jar
 netty-transport-4.1.48.Final.jar
 netty-transport-native-epoll-4.1.48.Final-linux-x86_64.jar
 netty-transport-native-kqueue-4.1.48.Final-osx-x86_64.jar
 netty-transport-native-unix-common-4.1.48.Final.jar

2.1.2 Third-Party Libraries - Version 2.8.2 and above

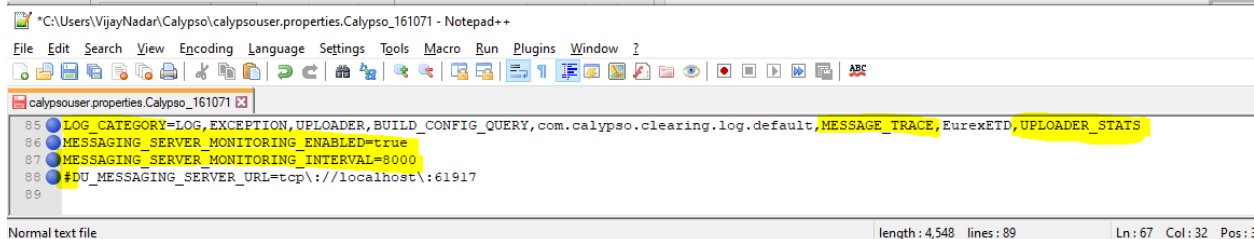
The following third-party libraries are included in the delivery:

org.apache.qpid:proton-j

```
org.apache.qpid:qpid-jms-client
org.apache.geronimo.specs:geronimo-jms_2.0_spec
org.apache.camel:camel-amqp
io.netty:netty-buffer
io.netty:netty-codec
io.netty:netty-codec-http
io.netty:netty-common
io.netty:netty-handler
io.netty:netty-resolver
io.netty:netty-transport
io.netty:netty-transport-native-epoll
io.netty:netty-transport-native-kqueue
io.netty:netty-transport-native-unixcommon
```

2.2 Environment

To fetch & trace the incoming message from EUREX in Log files, configure the below environment properties in the Environment.



```
*C:\Users\VijayNadar\Calypso\calypsouser.properties.Calypso_161071 - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
calypsouser.properties.Calypso_161071
85 LOG_CATEGORY=LOG_EXCEPTION,UPLOADER,BUILD_CONFIG_QUERY,com.calypso.clearing.log.default,MESSAGE_TRACE,EurexETD,UPLOADER_STATS
86 MESSAGING_SERVER_MONITORING_ENABLED=true
87 MESSAGING_SERVER_MONITORING_INTERVAL=8000
88 #DU_MESSAGING_SERVER_URL=tcp://localhost:61917
89
Normal text file length: 4,548 lines: 89 Ln: 67 Col: 32 Pos: 3
```

LOG_CATEGORY – Add the following log categories:

MESSAGE_TRACE = This log category allows printing fixml syntax message in all Incoming feed queues Log file.

UPLOADER_STATS = This log category prints the time taken to process the message in feed translator, incoming feed, and data persister.

MESSAGING_SERVER_MONITORING_ENABLED=true - It enables the Calypso Messaging server to print the internal and queue statistics by monitoring the queues and messages are consumed or not.

MESSAGING_SERVER_MONITORING_INTERVAL=8000 – Interval in ms. The Calypso Messaging Server checks statistics based on this interval.

Comment out **DU_MESSAGING_SERVER_URL**:

```
#DU_MESSAGING_SERVER_URL=tcp://localhost:61917
```

2.3 Create Fixml Account and Download Certificate, PS12 and Private Key

Create a Fixml account and generate the certificate.

Sample Fixml account

Market - EUREX
Environment - Simulation
Select Member account - CALXV
Account Name - CALXV_CALXVCALYPSOFIX
Description - CALYPSO Direct Connect Fixml Account
Certificate - "CALXV_CALXVCALYPSOFIX.crt"

2.3.1 Overview - eurexetd.properties

Connectivity to EUREX is via JMS using the apache AMQP protocol. All the connectivity details including the SSL parameters are maintained in property file **eurexetd.properties** which is used in various configuration files using JNDI.

This file contains the connectivity details and the queue names to connect to.

This file contains the connection factory string with host & port and the SSL Parameters required as shown below. (AMQP has a limitation where all the connectivity parameters have to be provided as part of the Connection factory shown below and xml-based definition is not supported).

Example

```
connectionfactory.qpidConnectionFactory =
amqp://:@client1/?brokerlist='tcp://90.162.253.101:10170?ssl='true'&sasl_mechs='EXTERNAL'&ssl_cert_alias='calxv
_calxvcalypsofix'&trust_store='EUREXETD_TRUSTSTORE.jks'&trust_store_password='password'&key_store='EURE
XETD_KEYSTORE.jks'&key_store_password='calypso' '
```

SSL Certificates Description

In an SSL handshake the purpose of trust-store is to verify credentials and the purpose of key-store is to provide credential.

Key-store: A key-store contains private keys, and the certificates with their corresponding public keys.

Trust-store: A trust-store contains certificates from other parties that you expect to communicate with, or from Certificate Authorities that you trust to identify other parties.

Error Task

The following mapping values need to be set to create an error task for connection issues:

Name = EurexETD/Translator

Interface Value = CurrentAttemptTaskCreationCount

Calypso Value = <number of failed attempts before creating the error task>

Name = EurexETD/Translator

Interface Value = AttemptCounterResetInterval

Calypso Value = <number of milliseconds to reset the connection counter after a successful connection –It should be greater than recoveryInterval from datauploaderExternalURI.xml>

2.3.2 Generate Key-Store and Trust-Store

Generate Key-Store

Key-Store must be generated only when the validity of existing one on Eurex portal has expired or it has been asked by Eurex support.

1. Generate JKS file on local

Open cmd from the path where CALXV_CALXVCALYPSOFIX.p12 is placed.

Execute this command:

```
keytool -importkeystore -srckeystore CALXV_CALXVCALYPSOFIX.p12 -srcstoretype PKCS12 -destkeystore EUREXETD_KEYSTORE.jks
```

```
C:\Users\VijayNadar\Downloads>keytool -importkeystore -srckeystore CALXV_CALXVCALYPSOFIX.p12 -srcstoretype PKCS12 -destkeystore EUREXETD_KEYSTORE.jks
Enter destination keystore password:
Re-enter new password:
Enter source keystore password:
Entry for alias calxv_calxvcalypsuffix successfully imported.
Import command completed: 1 entries successfully imported, 0 entries failed or cancelled
```

The file EUREXETD_KEYSTORE.jks is generated in the same path.

2. Test the generated file

Execute this command:

```
keytool -list -keystore EUREXETD_KEYSTORE.jks
```

```
C:\Users\VijayNadar\Downloads>keytool -list -keystore EUREXETD_KEYSTORE.jks
Enter keystore password:

Keystore type: JKS
Keystore provider: SUN

Your keystore contains 1 entry
calxv_calxvcalypsuffix, Mar 2, 2021, PrivateKeyEntry,
Certificate fingerprint (SHA1): 4F:3A:F3:0E:0D:28:AC:9D:56:66:5A:1D:54:1E:68:26:98:1F:6A:C5
```

Generate Trust-Store

Trust-Store must be generated only when the validity of existing one on Eurex portal has expired or it has been asked by Eurex support.

1. Generate JKS file on local

Open cmd from the path where CALXV_CALXVCALYPSOFIX.crt is placed.

Execute this command:

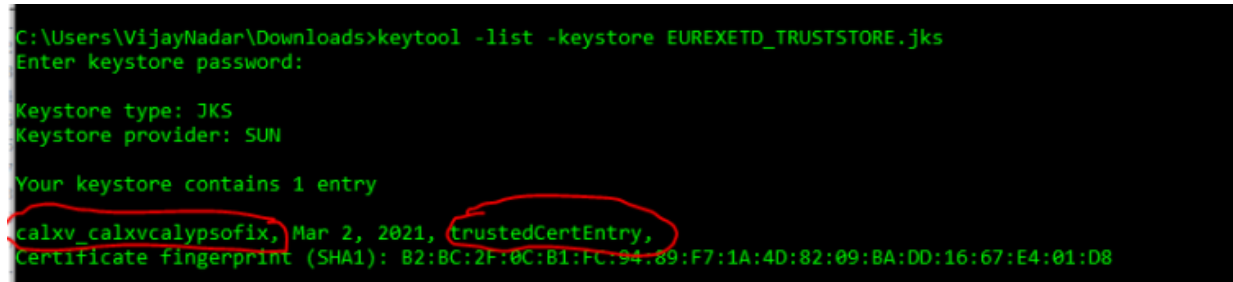
```
keytool -importCert -file CALXV_CALXVCALYPSOFIX.crt -keystore EUREXETD_TRUSTSTORE.jks -alias CALXV_CALXVCALYPSOFIX
```

The file EUREXETD_TRUSTSTORE.jks will be generated in the same path.

2. Test the generated .JKS file

Execute this command:

```
keytool -list -keystore EUREXETD_TRUSTSTORE.jks
```



```
C:\Users\VijayNadar\Downloads>keytool -list -keystore EUREXETD_TRUSTSTORE.jks
Enter keystore password:

Keystore type: JKS
Keystore provider: SUN

Your keystore contains 1 entry
calxv_calxvcalypsofix, Mar 2, 2021, trustedCertEntry,
Certificate fingerprint (SHA1): 82:BC:2F:0C:B1:FC:94:89:F7:1A:4D:82:09:8A:DD:16:67:E4:01:D8
```

2.4 Property Files

To connect EUREX fixml account (external source) with Eurex ETD interface process in the mode where you want to fetch Live trade, Position and News details, the properties files below must be configured.

Rename the following properties files by removing .sample from each file name.

These files are located <under <calypso home>/client/resources/:

"eurexetd.properties.sample" to "eurexetd.properties"

"EUREXETDTRADECONFIRMATIONService.properties.sample" to "EUREXETDTRADECONFIRMATIONService.properties"

"EUREXETDTRADECONFIRMATIONNCMService.properties" to "EUREXETDTRADECONFIRMATIONNCMService"

"EUREXETDWORKFLOWService.properties.sample" to "EUREXETDWORKFLOWService.properties"

"EUREXETDWORKFLOWNCMService.properties.sample" to "EUREXETDWORKFLOWNCMService.properties"

"EUREXETDPUBLICService.properties.sample" to "EUREXETDPUBLICService.properties"

"EUREXETDUPLOADERService.properties.sample" to "EUREXETDUPLOADERService.properties"

"datauploaderExternalURI.xml.sample" to "datauploaderExternalURI.xml"

"gatewayservices.properties.sample" to "gatewayservices.properties"

Once the files are configured, they need to be copied to <calypso home>/tools/calypso-templates/resources/.

1. Add connectivity details in the file "<calypso home>/client/resources/eurexetd.properties".

```

1 ##### 1.0###
2
3 java.naming.factory.initial=org.apache.qpid.jmx.jndi.JmxInitialContextFactory
4
5 connectionfactory.edgpidConnectionFactory=
6
7 #Internal
8 queue.calypso.queue.persistor=calypso.queue.persistor
9 queue.calypso.queue.translator=calypso.queue.translator
10 queue.calypso.queue.outgoing=calypso.queue.outgoing
11 #Message Injector Queues
12 queue.eurexetd.calypso=queue.eurexetd.calypso
13 queue.calypso.eurexetd=queue.calypso.eurexetd
14
15 #FixML
16 queue.broadcastAddressTradeConfirmation=broadcast.CALXV_CALXVCALYPSOFIX.TradeConfirmation
17 queue.broadcastAddressTradeConfirmationNCH = broadcast.CALXV_CALXVCALYPSOFIX.TradeConfirmationNCH
18 queue.broadcastAddressWorkflow = broadcast.CALXV_CALXVCALYPSOFIX.Workflow
19 queue.broadcastAddressWorkflowNCH = broadcast.CALXV_CALXVCALYPSOFIX.WorkflowNCH
20 queue.broadcastAddressPublic = broadcast.CALXV_CALXVCALYPSOFIX.Public

```

Open eurexetd.properties file and update fixml account name on this properties file in KeyAlias with small case and FixML queue sections with upper case as highlighted in Green.

Example: Calypso Simulation Fixml account name is CALXV_CALXVCALYPSOFIX, there you need to express your own fixml account on the green highlighted places on the above.

Secondly, Specify the generated EUREXETD_KEYSTORE and EUREXETD_TRUSTSTORE jks file path with file extension and password. Refer the highlighted in yellow.

```

28
29 # The value should be left empty unless a value is provided by Calypso out of the box. This attribute is mandatory to be present even if its value is empty
30 # If 'logMessages' property is true, then transformation files will be generated.
31 # By default 'messageFileDir' is an optional field. If messageFileDir is not provided then transformation file will be generated in CALYPSO_HOME\source_name folder
32 logMessages=true
33 messageFileDir=C:\Users\VijayNadar\Calypso\WorkflowNCH
34

```

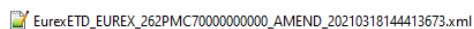
Ensure the Message Injector queues are uncommented:

```

7
8 #Internal
9 queue.calypso.queue.persistor=calypso.queue.persistor
10 queue.calypso.queue.translator=calypso.queue.translator
11 queue.calypso.queue.outgoing=calypso.queue.outgoing
12 #Message Injector Queues
13 queue.eurexetd.calypso=queue.eurexetd.calypso
14 queue.calypso.eurexetd=queue.calypso.eurexetd
15

```

2. Open files (EUREXETDTRADECONFIRMATIONService.properties, EUREXETDTRADECONFIRMATIONNCHService.properties, EUREXETDWORKFLOWService.properties, EUREXETDWORKFLOWNCHService.properties, EUREXETDPUBLICService.properties and EUREXETDUPLOADERService.properties) and update LogMessages to true to save fixml messages into Local path mentioned in messageFileDir = example C:\Users\VijayNadar\Calypso\WorkflowNCH. Express each directory with double backslash.



The fixml file is created in specified path with format "InterfaceName_RefId_Action_Datetime.xml"

If LogMessages = true is set and messageFileDir is in commented by "#" status, then all the fixml files will be stored in default "<calypso home>/Calypso/eurexetd"

Ensure EUREXETDUPLOADERService.properties file is configured as highlighted in below.

```

C:\calypso\calypso-16.1.0.71\client\resources\EUREXETDUPLOADERService.properties - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window 2
EUREXETDUPLOADERService.properties
1 #This property file is used to receive EB (Dealer) trades from EUREX
2
3 #Do not change the following 2 properties, these are required by the uploader framework to translate the message properly
4 uploadSource=EurexETD
5 uploadFormat=FIXML
6
7 #Do not change this property, it needs to be as defined to find the right connectivity definitions
8 ExternalURIPrefix=source
9
10 #Change the following property to point to the Queue where the FCM receives the EB (Dealer) trades, it represents the JNDI Name defined in eurex.properties
11 ExternalIncomingURI=eurexetd.calypso
12 #Do not change this property
13 #ExternalIncomingURIParams=?connectionFactory=#etdampConnectionFactory&destinationResolver=#etdjniDestinationResolver
14 ExternalIncomingURIParams=
15
16 #Change the following property to point to the request Queue where the FCM sends the requests, it represents the JNDI Name defined in eurex.properties
17 ExternalOutgoingURI=calypso.eurexetd
18
19 #Do not change this property
20 #Do not remove the parameter preserveMessageQos, it is needed to preserve the JMSReplyTo Header.
21 #ExternalOutgoingURIParams=?connectionFactory=#etdampConnectionFactory&destinationResolver=#etdjniDestinationResolver&preserveMessageQos=true
22 ExternalOutgoingURIParams=
23
24 #the following parameter represents the response queue where the FCM expects the responses from EUREX
25 #this value will be set as value to JMSReplyTo Header
26 ReplyToAddress=
27
28 BusinessFlowUploader
29 Features=AuditOn,AutoRejectOn
30
31 # The value should be left empty unless a value is provided by Calypso out of the box. This attribute is mandatory to be present even if its value is empty
32 # If 'logMessages' property is true, then transformation files will be generated.
33 # By default 'messageFileDir' is an optional field. If messageFileDir is not provided then transformation file will be generated in CALYPSO_HOME\<source_name> folder
34 logMessages=true
35 messageFileDir=C:\\Users\\VijayNadar\\Calypso\\MessageInjector

```

3. Open properties file datauploaderExternalURI.xml and uncomment the EUREX connectivity.

```

175 <bean id="eurexetdSource" parent="eurexetdamqp">
176   <property name="concurrentConsumers" value="{EUREXETD_INCOMING_CONSUMERCOUNT:1}"/>
177   <property name="maxConcurrentConsumers" value="{EUREXETD_INCOMING_CONSUMERCOUNT:1}"/>
178 </bean>
179 <bean id="eurexetdamqp" class="org.apache.camel.component.amqp.AMQPComponent">
180   <property name="connectionFactory" ref="etdampConnectionFactory"/>
181 </bean>
182 <bean id="etdampConnectionFactory" class="org.springframework.jndi.JndiObjectFactoryBean">
183   <property name="jndiName" value="etdqpIdConnectionFactory" />
184   <property name="jndiTemplate" ref="etdjniTemplate" />
185 </bean>
186 <bean id="etdjniDestinationResolver" class="org.springframework.jms.support.destination.JndiDestinationResolver">
187   <property name="jndiTemplate" ref="etdjniTemplate" />
188 </bean>
189 <bean id="etdjniTemplate" class="org.springframework.jndi.JndiTemplate">
190   <property name="environment">
191     <bean class="org.springframework.beans.factory.config.PropertiesFactoryBean">
192       <property name="location" value="classpath:eurexetd.properties" />
193     </bean>
194   </property>
195 </bean>
196 </beans>

```

2.5 Batch Files

2.5.1 calypsoMessagingServer.bat

This component acts as a Message Bus for the other components of the Messaging Framework, Active MQ is used as the Message Bus. All the components of the messaging framework use this Message bus to exchange messages and process them.

In calypsoMessagingServer.bat file add "-trace com.calypso.infra.messaging.CalypsoMessagingServerMonitor", this will show how many messages are received, consumed, enqueued, dequeued in Log file.

```

64 ::
65
66 "C:\calypso\calypso-16.1.0.71\client\bin\calypso.bat" oom.calypso.apps.startup.StartCalypsoMessagingServer -env Calypso_161071 -log
67
68 GOTO:EndScript

```

2.5.2 dataPersistor.bat

The Data Persistor component's main purpose is to persist objects into calypso data base. There is a designated queue in the Message Bus, to which rest of the components can send messages (all different types of messages like trades, BO messages, collateral, and limits updates and so on). Data Persistor identifies the right persistor class based on the object passed and invokes the persistor to persist the objects. At times there can be a collection of objects passed as a single message to the persistor in which case the persistor persists all the objects as a single transaction so that either all the objects are persisted, or none are persisted.

2.5.3 feedTranslator.bat

The purpose of this component is to translate the external message to a format understood by Calypso which is the data uploader xml format. If the translation is successful, an in-memory trade object is created, and now the trade is ready to be processed by the Risk system to check for limits and collateral. Feed Translator sends the message to the Head Room Check component or to the Data Persistor based on whether risk is part of the solution.

2.5.4 EUREXETD Incoming Feed Batch Files

The following incoming feed batch files consume messages from Eurex.

```

EUREXETDTRADECONFIRMATIONIncomingFeed.bat
EUREXETDTRADECONFIRMATIONNCMIncomingFeed.bat
EUREXETDWORKFLOWIncomingFeed.bat
EUREXETDWORKFLOWNCMIncomingFeed.bat
EUREXETDPUBLICIncomingFeed.bat

```

The following incoming feed batch files consume messages from a specified path.

```

EUREXETDTRADEUPLOADERIncomingFeed.bat
EUREXETDInjectMessage.bat

```

Configure EUREXETDInjectMessage.bat file with -folder from where to consume the xml files to inject and EUREXETDTRADEUPLOADERIncomingFeed.bat

```

63 :: To specify the directory for logs.
64 :: -startID 1 -noOfDeals 1
65
66 "C:\calypso\calypso-16.1.0.71\client\bin\calypso.bat" oom.calypso.apps.startup.StartMessageInjector -env Calypso_161071 -log -queue source:queue.eurexetd.calypso -logprefix EUREXETDMessageInjector -folder
67
68 GOTO:EndScript

```

Note: Once the Injector is consumed the xml files then remove those files manually from that specific path.

Optional - This is for performance testing only

To process one fixml file multiple times, configure eurexEtdInjectMessage.bat as below:

```

"C:\calypso\calypso-16.1.0.72-INTERFACES_16-1-SNAPSHOT\client\bin\calypso.bat" oom.calypso.apps.startup.StartMessageInjector -env Calypso_161071 -log -queue source:queue.eurexetd.calypso -logprefix EUREXETDMessageInjector
-configure C:\Users\Wjaya\MyNadar\Calypso\MessageInjector\Uploader_files\EurexETD_EUREX_266774300000000000_NEW_20210330084432216.xml -startID 23 -noOfDeals 10 -config EUREXETDUPLOADER -appname MessageInjector -module datauploader
-user calypso_user -password calypso %LOG_DIR% %*

```

-config EUREXETDUPLOADER

-folder instead of -template

C:\Users\VijayNadar\Calypso\MessageInjector\Uploader_file\EurexETD_EUREX_266T743000000000_NEW_20210330084432216.xml

-startID 1 - Used to start the external reference number i.e., RptID

-noOfDeals 10 - Used to setup if you want to process one fixml multiple times (in this case it will process 10 times) you can increase the noOfDeals as per your requirement)

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <FIXML xmlns="www.eurexchange.com/technology">
3    <TrdCaptRpt RptID="#ID#" TransTyp="0" RptTyp="0" TrdTyp="0" TrdHandlInst="{
      LastUpdateTm="2021-03-30T07:44:31.583+00:00">
4      <Hdr SID="ECAG" TID="CALXV" Snt="2021-03-30T07:44:31.590+00:00"/>
5      <Pty ID="CALXV" R="4"/>
6      <Pty ID="CALXV" R="1"/>
7      <Pty ID="A1" R="38"/>

```

In fixml file configure RptID #ID# and place the file in Specified folder

Now start the eurexEtdInjectMessage.bat. It will process 1 fixml message 10000 times with externalreference starting with 1.

Setup Requirements

3.1 Update Manager Engine

Update Manager is only interested in the BO Messages of the following message types.

INCOMINGFEEDMSG
OUTGOINGFEEDMSG
UPLOADEREXCEPTIONMSG
DATAPERSISTORMSG

Whenever a REPROCESS/RESEND message event for the above-mentioned message types is generated, Update Manager will listen to that event and send to the appropriate component based on the message type.

Go to Web **Admin** and check that "UpdateManagerEngine" is configured as below

Engine Configuration

Unable to edit a running engine. Displaying in read-only mode.

Engine Name: **UpdateManagerEngine**

Engine ID: 421011

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

Display Name: Update Manager Engine

Application Type: EngineServer

Description:

Persisted Event Configuration: **PSEventAccountBilling**

Event Filters: **AllTransfersKnownEventFilter**

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:

Attribute Name	Attribute Value
ACCENGINE_PRDFAM_SELL_POSITION	
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_CONFIG	
LIQUIDATION_TIMEOUT	
LocalPort	
MAX_TIMER_POSITION	

Go Back

Transfer Engine	EngineServer	EngineServer	VLMANADAR	0	0	0	0	No Consumed Events	no events	Thu Mar 11 08:06:15 GMT 2021	Batch	1	Loading up to 50000 events
-----------------	--------------	--------------	-----------	---	---	---	---	--------------------	-----------	------------------------------	-------	---	----------------------------

Start the UpdateManagerEngine as part of the Engine server.

3.2 Workflow Configuration

The sample workflows are given under resource folder for the following MessageType workflow.

Import these workflows which will enable BO Message to listen.

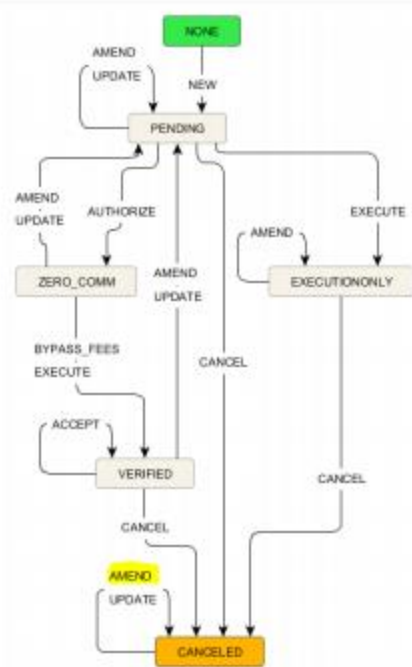
GATEWAYMSG.wf

INCOMINGFEEDMSG.wf

DATAPERSISTORMSG.wf

Eurex incoming feed batch files are consumed in real time. When the Allocation report comes from the Workflow or WorkflowNCM queue at the same time, the IncomingFeed does not understand that the Allocation report should be processed before cancelation, so adding additional workflow in PSeventTrade will avoid BO message to show as pending status.

In trade workflow add CANCELED – AMEND - CANCELED to avoid Allocation report to go in pending status in BO message report.



If the Allocation report comes prior to the Trade Capture report, it will not be reprocessed.

Therefore, adding the workflow PENDING – COMPLETE – COMPLETED enables the park and process feature in BO message to automatically retrigger the Allocation report if it comes prior to Trade Capture report.



3.3 BO Message Column Configuration

The below sample attribute details are received for Trade capture report, it differs for other report.

Message Viewer

Message

Main Audit Grouping Transfers Tasks Advice Documents Matching Audit Matching

General Workflow Contact

Message: 128124 / 0
Trade Id: 143067 / 0
Transfer Id: 0
Linked Id: 0
Creation Date: 19/03/21 09:57:06
☐ Is Edited Latest Document

Type: INCOMINGFEEDMSG
Status: COMPLETED
Action: NEW
SubAction: NONE

Attributes

Name	Value
UploadObject	EurexETDMessage
TotalMessage	0
GroupId	0
UploadObjectStatus	Completed
ProductType	Option
UploadObjectExternalRef	EUREX_2631A3C0000000000
StrkPx	165
UploadObjectSourceMessageId	EUREX_2631A3C0000000000
MessageStatus	Completed
OptAt	0
MessageType	TrdCapRpt
BizDt	2021-03-19
SID	ECAG
Service	EUREXETDTRADECONFIRMATION
MMY	202104
RptID	2631A3C0000000000
ExecutingTrader	SIM001
CounterParty	A1
PutCall	1
OrderOriginationTrader	CALXVSIM001
Client	1001
UploadObjectFailedAt	FeedTranslator
SYM	OGBL
MessageFormat	FCM
MessageSource	EurexETD
UploadAdviceDocumentID	38043

Add these attributes in domain name “MsgAttributes” and restart navigator and add these attributes in BO Message report column configuration.

Domain Values

Reload Save Save All Constraints Setup

msgattributes 3 of 23 ☐ Value

Client
Client Id
Cntp Agent
CntpRef

Name: MsgAttributes
Value: Client
Comment:

Sample BO Message Column configuration to view all message attributes in each BO Message

Message Report 06/03/21 07:49:31 / EDT															
Report Data View Export Market Data Process Utilities Help															
Criteria															
MESSAGE_ID	Trade ID	Hq_Atr_SID	Hq_Atr_Ort	Hq_Atr_CounterParty	Hq_Atr_MessageType	Hq_Atr_SID	Hq_Atr_UboAcctExtNameRef	Hq_Atr_ApId	Hq_Atr_ApRefId	ACTION	Hq_Status	MESSAGE_TYPE	EVENT_TYPE	Hq_Linked ID	ORIGINAL_DATE
128100	143033ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 15:59:02 oxdt oxdt
128101	143033ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W6000000000	2627W6000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 07:57:08 oxdt oxdt
128102	143033ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:04:32 oxdt oxdt
128103	143033ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W2000000000	2627W2000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:08:09 oxdt oxdt
128104	143033ECAG	1001	A1	TricCapital	PESX	BUREX_2627W7000000000	2627W7000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:05:00 oxdt oxdt
128105	143033ECAG	1001	A1	TricCapital	PESX	BUREX_2627W3000000000	2627W3000000000	2627W7000000000	2627W7000000000	NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:09:12 oxdt oxdt
128106	143033ECAG	1001	A1	TricCapital	PESX	BUREX_2627W1000000000	2627W1000000000	2627W7000000000	2627W7000000000	NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:09:26 oxdt oxdt
128107	143033ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W4000000000	2627W4000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:10:48 oxdt oxdt
128108	143033ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W3000000000	2627W3000000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:12:48 oxdt oxdt
128109	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:19:56 oxdt oxdt
128110	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W4000000000	2627W4000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:48:59 oxdt oxdt
128111	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W6000000000	2627W6000000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 08:45:53 oxdt oxdt
128112	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:04:30 oxdt oxdt
128113	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W6000000000	2627W6000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:21:42 oxdt oxdt
128114	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W6000000000	2627W6000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:22:58 oxdt oxdt
128115	0			EndOfAssignment		BUREX_public_EndOfAssignment	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:30:51 oxdt oxdt
128116	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W9000000000	2627W9000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:31:618 oxdt oxdt
128117	0			EndOfAssignment		BUREX_public_EndOfAssignment	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128118	0			EndOfAssignment		BUREX_public_EndOfAssignment	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128119	0			DividendAdjustment		BUREX_public_DividendAdjustment	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128120	0			DividendAdjustment		BUREX_public_EndOfAssignment	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128121	0			DividendAdjustment		BUREX_public_DividendAdjustment	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128122	0			CapitalAdjustment		BUREX_public_CapitalAdjustment	2627W3000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128123	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000	2627W3000000000	2627W3000000000	NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128124	143036ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W6000000000	2627W6000000000	2627W3000000000	2627W3000000000	NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 09:40:627 oxdt oxdt
128125	143073ECAG	1001	A1	PeakRefit	OGIM	BUREX_2627W4000000000	2627W4000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 10:01:01 oxdt oxdt
128126	143073ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 10:45:44 oxdt oxdt
128127	143073ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 10:45:44 oxdt oxdt
128128	143039ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2000000000	2627W2000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 10:59:76 oxdt oxdt
128129	143442ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2800000000	2627W2800000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:05:77 oxdt oxdt
128130	143442ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W2800000000	2627W2800000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:05:53 oxdt oxdt
128131	143449ECAG	1001	A1	TricCapital	OGIM	BUREX_2627W3800000000	2627W3800000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:40:22 oxdt oxdt
128132	143448ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			COMPLETE	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:40:28 oxdt oxdt
128133	143492ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:52:51 oxdt oxdt
128134	143492ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:52:51 oxdt oxdt
128137	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000002	2627W3000000002	2627W3000000000	2627W3000000000	NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:52:87 oxdt oxdt
128138	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128139	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128140	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128141	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128142	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128143	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128144	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128145	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128146	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128147	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128148	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128149	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128150	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128151	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128152	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128153	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128154	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128155	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128156	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128157	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128158	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128159	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128160	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128161	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128162	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128163	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128164	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128165	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128166	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128167	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128168	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128169	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/2017 11:58:28 oxdt oxdt
128170	143450ECAG	1001	A1	TricCapital	PGIM	BUREX_2627W3000000000	2627W3000000000			NEW	COMPLETED	INCOMINGFEEDMSG	EX_INCOMINGFEEDMSG		01/03/

3.4 Account Configuration

3.4.1 Client Account Configuration

Accounts Definition - Authorization mode OFF CL0009 / 78260 - version 78

Account Utilities Reports Process Help

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

Account Name: CL0009

Processing Org: SETCLEAR Ccy: AUTO Id: 78260

Type: SETTLE SubType: Clearing ☒ Auto/Template Acc

External Name: Client 3 STD EN Interface Rule: Aggregate

Description: Client 3 STD D

Legal Entity (F2): CLIENT 3 STD Role: Client

Creation Date: 22/01/19 13:57:09 ☒ Create by Acc Engine only ☐ Multi-Owner

Closing Account: Last Closing Date:

Parent Account: Parent Id: 0

External Settl.: External Cash Account:

☐ Balance

Status: Active

Active From:

Active To:

☐ by Trade Date

Retroactivity:

☐ Interest Bearing ☐ Billing ☐ Is Proprietary

Proprietary Account:

Sub-Account Type:

Key	Value
OMEEEX_CounterPartyAccount	
OMEEEX_Member_ID	
Clearing Book	EUREX (LSE)
EUREXDirect_ClientAccount	1001
EUREXDirect_CounterPartyAccount	
EUREXDirect_Member_ID	
EurexETD_ClientAccount	1001
EurexETD_CounterPartyAccount	
EurexETD_Member_ID	

New Delete Save SaveAsNew CustomerTransfer

Accounts without Account attributes in above format will be ignored and trade will flow to Error account or calypso mapping PO defined acc.

Add Account attributes with prefix as Interface Name specified in Calypso Mapping for the CCP.

For Example:

Interface name – “EurexETD” followed by underscore – “_” and then postfix as “ClientAccount” (EurexETD_ClientAccount)

Additional Client Account Configuration (optional)

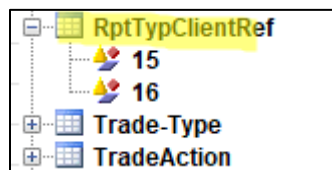
From Trade capture and allocation report XML file, if client wants to capture Client Account details from different field for give-up and take-up then add the below mappings manually.

Name:	EurexETD/Translator
Interface Value:	ClientRefLookupField
Calypso Value:	RptTypClientRef
Reverse Default:	☐

Interface Value	Calypso Value
ClientRefLookupField	“RptTypClientRef”

Type Name:

Add new type name called “RptTypClientRef”



Name:	EurexETD/RptTypClientRef
Interface Value:	15
Calypso Value:	Txt2
Reverse Default:	☐

Name:	EurexETD/RptTypClientRef
Interface Value:	16
Calypso Value:	Txt1
Reverse Default:	☐

Name:	EurexETD/RptTypClientRef
Interface Value:	020
Calypso Value:	Txt2

Name:	EurexETD/RptTypClientRef
Interface Value:	030
Calypso Value:	Txt1

Interface Value	Calypso Value
15	“Txt2”

Interface Value	Calypso Value
16	"Txt1"
020	"Txt2"
030	"Txt1"

Field Mapping:

Trade Capture Report Mappings:

Name:	EurexETD/FieldMapping
Interface Value:	TrdCaptRpt@TrnsfrRsn
Calypso Value:	TransferReason,AvgPriceB,ReportType,ExecutionSource,TakeupKeywords,RptTypClientRef

Name:	EurexETD/FieldMapping
Interface Value:	TrdCaptRpt/RptSide@Txt1
Calypso Value:	SubAccount,Txt1

Name:	EurexETD/FieldMapping
Interface Value:	TrdCaptRpt/RptSide@Txt2
Calypso Value:	ClientRef,Txt2

Interface Value	Calypso Value
TrdCaptRpt@TrnsfrRsn	"RptTypClientRef"
TrdCaptRpt/RptSide@Txt1	"Txt1"
TrdCaptRpt/RptSide@Txt2	"Txt2"

Allocation report Mappings

Name:	EurexETD/FieldMapping
Interface Value:	AllocRpt@RptTyp
Calypso Value:	AllocType,RptTyp,RptTypClientRef

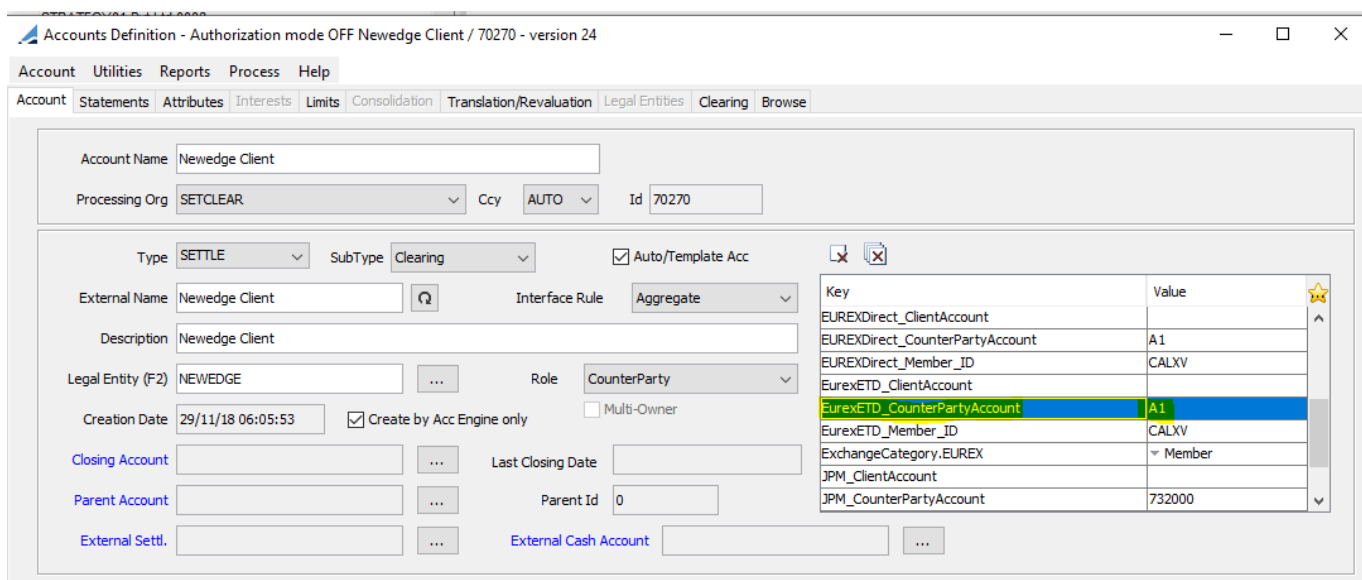
Name:	EurexETD/FieldMapping
Interface Value:	AllocRpt/Alloc@Txt1
Calypso Value:	SubAccount,Txt1

Name:	EurexETD/FieldMapping
Interface Value:	AllocRpt/Alloc@Txt2
Calypso Value:	ClientRef,Txt2

Interface Value	Calypso Value
AllocRpt@RptTyp	"RptTypClientRef"
AllocRpt/Alloc@Txt1	"Txt1"
AllocRpt/Alloc@Txt2	"Txt2"

Once the above mappings are added, for given-up trades, ClientAccount will be picked from Txt2 and for take-up trades, ClientAccount will be picked from Txt1.

3.4.2 Counterparty Account Configuration



FCM trade interface primary look is to capture Counterparty account.

Accounts without Account attributes in above format will be ignored and trade will fail to load.

Add Account attributes with prefix name as Interface Name which is used in Calypso Mapping for the CCP.

For Example:

Interface name – "EurexETD" followed by underscore – "_" and then postfix as "CounterPartyAccount"
(EurexETD_CounterPartyAccount)

Additional Member Id Configuration (optional)

If the XML file contains executing broker Member Id, then in that case, FCM can configure Member Id to validate from XML file with combination of two fields ExecutingBroker Party role = 1 and Account Party Role = 38 to determine the CounterPartyAccount definition.

Note: If FCMs do not want Member Id validation, they can ignore the member Id configuration from counterparty account and field mapping, and it will only validate the primary lookup from Account.

To validate the Member Id from ExecutingBroker and Account Party Role, you need to configure the below mappings for EurexETD/FieldMapping:

Interface Value	Calypso Value
TrdCaptRpt/Pty[R=1]@ID	CounterPartyAccountMemberId
AllocRpt/Alloc/Pty[R=95]@ID	CounterPartyAccountMemberId
PosMntRpt/Pty[R=1]@ID	CounterPartyAccountMemberId

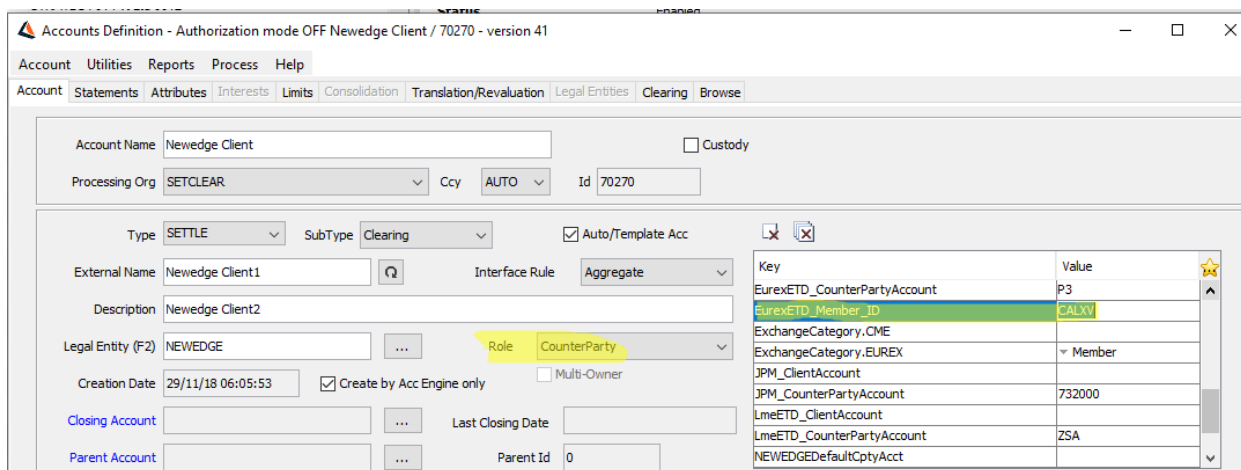
In addition to the EurexETD csv upload, map the above manually to lookup the Counterparty account with the combination of ExecutingBroker and Account Party Role.

Note: For the above Interface value, if there is any Calypso Value already present then add the Calypso Value with a comma:

Calypso Value = <existing value>,CounterPartyAccountMemberId

Once the above mapping is added, then add the party role = 1 fixml "ID" value in Counterparty Account definition as per below.

<Pty ID="CALXV" R="1"/>



Interface name – "EurexETD" followed by underscore – "_" and then postfix as "Member_ID" (EurexETD_Member_ID)

Post the above configuration, whenever Eurex message is received, the system will lookup the counterparty account with the combination of two fields EurexETD_CounterPartyAccount and EurexETD_Member_ID.

CounterPartyErrorAccount

If the CounterPartyAccount is not found or defined, then the trade will flow into CounterPartyErrorAccount if you specify the following EurexETD/Translator mapping:

Interface Value = CounterPartyErrorAccountAttribute

Calypso Value = CounterPartyErrorAccount

The CounterPartyErrorAccount is defined as an Exchange LE attribute:

Legal Entity- Version - 3 [17240202/Calypso_172381/calypso_user]

Utilities Help

Short Name EUREX Status Enabled
Full Name Eurex Role(s) MarketPlace

Legal Entity Attributes Window - Version - 0

Search
Legal Entity EUREX
Attribute Group
Role ALL Processing Org ALL
Attribute Type CounterPartyErrorAccount Value Newedge HOUSE

Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
235280	ALL	EUREX	ALL		CounterPartyErrorAccount	Newedge HOUSE

Calypso Mapping Requirements

The Calypso Mapping window allows mapping data for various interfaces by providing the interface values and the corresponding Calypso values.

The following access permissions apply to the Calypso Mapping window:

ViewCalypsoMapping – Permission to view mappings.

ModifyCalypsoMapping – Permission to modify mappings.

4.1 Eurex ETD Installer Package

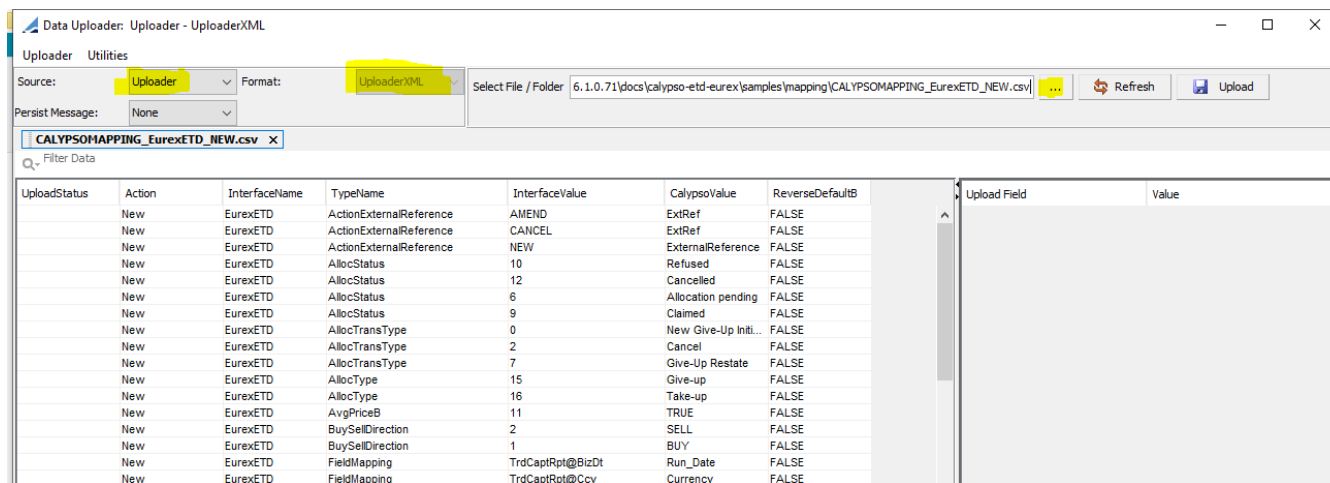
Interface name and Type name are automatically created in Calypso Mapping through schema file when Execute SQL is processed as a part of Eurex ETD interface installation.

The mapping values can be imported using the Data Uploader with the file <calypso home>/docs/calypso-etd-eurex/samples/mapping/CALYPSOMAPPING_EurexETD_NEW.csv

Note: If you need to modify this file, please use Notepad or Notepad++ - Do not use Excel as it will erase the numerical values starting with Zero.

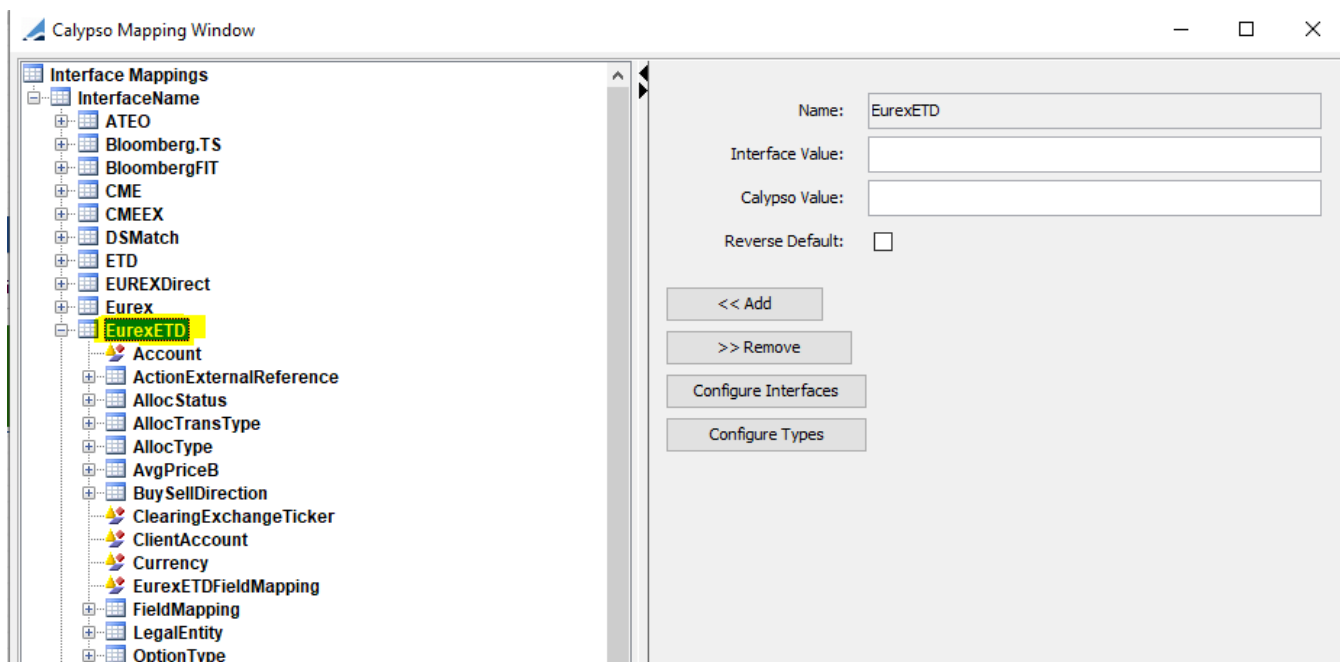
Open the Data Uploader window, select the source as “Uploader” and select the csv file mentioned above.

Then click **Upload**.

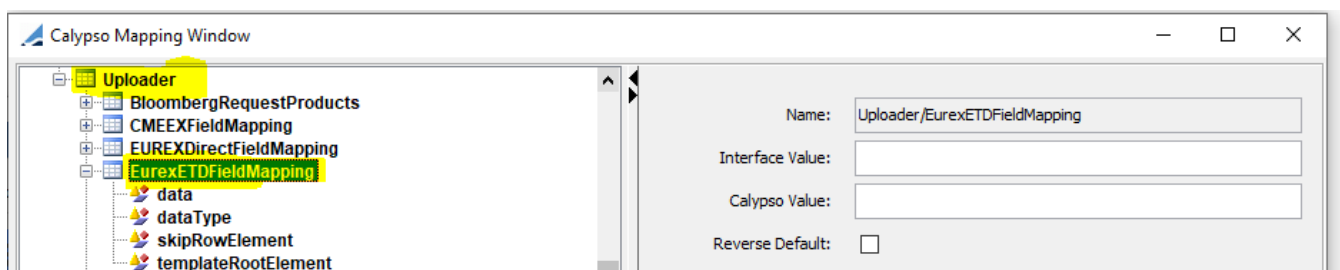


UploadStatus	Action	InterfaceName	TypeName	InterfaceValue	CalypsoValue	ReverseDefaultIS	Upload Field	Value
New	EurexETD	ActionExternalReference	AMEND	ExtRef	FALSE			
New	EurexETD	ActionExternalReference	CANCEL	ExtRef	FALSE			
New	EurexETD	ActionExternalReference	NEW	ExternalReference	FALSE			
New	EurexETD	AllocStatus	10	Refused	FALSE			
New	EurexETD	AllocStatus	12	Cancelled	FALSE			
New	EurexETD	AllocStatus	6	Allocation pending	FALSE			
New	EurexETD	AllocStatus	9	Claimed	FALSE			
New	EurexETD	AllocTransType	0	New Give-Up Initi...	FALSE			
New	EurexETD	AllocTransType	2	Cancel	FALSE			
New	EurexETD	AllocTransType	7	Give-Up Re-state	FALSE			
New	EurexETD	AllocType	15	Give-up	FALSE			
New	EurexETD	AllocType	16	Take-up	FALSE			
New	EurexETD	AvgPriceB	11	TRUE	FALSE			
New	EurexETD	BuySellDirection	2	SELL	FALSE			
New	EurexETD	BuySellDirection	1	BUY	FALSE			
New	EurexETD	FieldMapping	TrdCaptRpt@BizDt	Run_Date	FALSE			
New	EurexETD	FieldMapping	TrdCaptRpt@Ccy	Currency	FALSE			

Once the above is uploaded the calypso Mapping will look like below



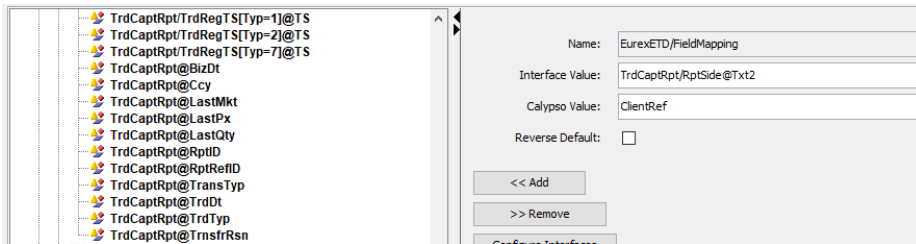
4.2 FieldMapping



Interface Value	Calypso Value
data	XML
dataType	XML
templateRootElement	FIXML
SkipRowElement	false

Eurex sends fixml message with multiple tags such as TrdCaptRpt, AllocRpt and PosMntRpt. In order to map all these tags, the "SkipRowElement" is added as "false" and field mappings need to be specified.

Field mapping allows mapping incoming tags to Calypso fields.



In the fielding mapping you can see interface value is included with tag details as a prefix in each line.

This ensure that those mappings are related to specific to those tagged messages field mappings.

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="www.eurexchange.com/technology">
3   <TrdCaptRpt RptID="263BHP700000000001" TransTyp='
  BizDt="2021-03-19" MLeaRptTyp="1" LastUpdateTm='
```

Example: fixml file with TrdCapRpt tag name received from EUREX is for NEW, AMEND & CANCEL for a trade, so mapping should be included along with prefix TrdCaptRpt with front slash "/" and then field details in mapping.

Allocation Report Field Mapping

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="www.eurexchange.com/technology">
3   <AllocRpt RptID="CY38YF" TransTyp="0" ID="2479525" RptTyp="13" Stat="6" BizDt="2021-03-18" TrdTyp="0" Side="2" Qty="52" LastMkt="XEUR" AvgPx="169.98" Ccy="EUR" TrdDt="2021-03-18" CustOrdHdInst="D">
4     <Hdr ID="H040" TrdID="CALXV" Sct="2021-03-18T14:44:06.423+00:00"/>
5     <AllExc TrdID="262PMC700000000000" MchTS="2021-03-18T14:13:18.423+00:00"/>
6     <Instrmt Sys="FGBM" Mch="202106"/>
7     <Alloc Qty="52" AllocPosEffct="0" Txt1="BA" Txt2="1001">
8       <Pty ID="CALXV" R="97"/>
9       <Sub ID="0" Typ="4001"/>
10    </Pty>
11    <Pty ID="CALXV" R="97">
12      <Sub ID="1" Typ="4001"/>
13    </Pty>
14    <Pty ID="A1" R="38"/>
15  </Alloc>
16 </AllocRpt>
17 </FIXML>
```

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
AllocRpt/AllExc@MchTS	Give-Up_Match_Trade_Status	MchTS="2021-03-18T14:13:18.423+00:00"	Used to capture trade keyword
AllocRpt/AllExc@TrdID	ExtRef	TrdID="262PMC700000000000"	"ExtRef" especially used in calypso mapping to refer external id to apply amend action
AllocRpt/Alloc/Pty[R=38]@ID	Account	<Pty ID="A1" R="38"/>	Counterparty Account
AllocRpt/Alloc/Pty[R=96]/Sub@ID	Party96	<Pty ID="CAEXV" R="96"> <Sub ID="0" Typ="4001"/>	Used to capture trade keyword
AllocRpt/Alloc/Pty[R=97]/Sub@ID	Party97	<Pty ID="CALXV" R="97"> <Sub ID="1" Typ="4001"/>	Used to capture trade keyword
AllocRpt/Alloc/Pty[R=98]/Sub@ID	Party98	<Pty ID="CALXV" R="98"> <Sub ID="1" Typ="4001"/>	Used to capture trade keyword

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
AllocRpt/Alloc@AllocPosEfct	OpenClose	AllocPosEfct="O"	Used to capture trade keyword
AllocRpt/Alloc@Txt1	SubAccount	Txt1="BA"	Used to capture trade keyword
AllocRpt/Alloc@Txt2	ClientRef	Txt2="1001"	Client account
AllocRpt/Instrmt@ContractDate	ContractPromptMonth_Date	ContractDate="20220615"	PromptMonth (i.e. Contract Month)
AllocRpt/Instrmt@MMY	PromptMonth_Date	MMY="202106"	PromptMonth (i.e. Contract Month)
AllocRpt/Instrmt@OptAt	ETO_SVN	OptAt="0"	ETO_SVN mapping will check serial number on ETO product.
AllocRpt/Instrmt@PutCall	OptionType,TradeType	PutCall="0"	OptionType is mapped to identify whether it is call or put Option (ref Type name OptionType for value mapping). TradeType is used to identify whether it is Option or future, in EUREX there is no separate field to specify whether it is future or option, if TradeType in Type name is not mapped specifically for Option then it will be considered as option and if the value do not match then it will be considered as future (refer Type name mapping for TradeType for more details)
AllocRpt/Instrmt@StrkPx	StrikePrice	StrkPx ="164.000"	Strike price
AllocRpt/Instrmt@Sym	ClearingExchangeTicker	Sym="FGBM"	Standard Contract : Clearing Exchange ticker Refer LegalEntity Mapping for additional Mapping's information

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
AllocRpt/Instrmt@ProdCmplx	ElectronicExchangeTicker	Sym="AXA8"	Flexible Contract: Electronic Exchange Ticker Refer LegalEntity Mapping for additional Mapping's information
AllocRpt@AvgPx	PricePremium	AvgPx="169.98"	Trade price
AllocRpt@BizDt	Run_Date	BizDt="2021-03-18"	Used to capture trade keyword
AllocRpt@Ccy	Currency	Ccy="EUR"	Trade currency
AllocRpt@LastMkt	Exchange	LastMkt="XEUR"	Exchange Short name (refer Type name LegalEntity for further value mapping)
AllocRpt@Qty	Quantity	Qty="52"	Quantity
AllocRpt@RptTyp	AllocType	RptTyp="15"	Used to capture trade keyword, value 15 = give-up, 16 = Take-up (Ref Type name AllocType for abbreviation mapping and TradeKeywords for trade attribute mapping)
AllocRpt@Side	BuySellDirection	Side="2"	Direction whether it is buy or sell (ref Type name BuySellDirection for value mapping)
AllocRpt@Stat	AllocStatus	Stat="6"	Used to capture trade keyword (Ref Type name AllocStatus for abbreviation mapping and TradeKeywords for trade attribute mapping)
AllocRpt@TransTyp	AllocTransType,Action	TransTyp="0"	Used to capture trade keyword for abbreviation mapping and TradeKeywords for trade attribute mapping) and TradeAction

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
AllocRpt@TrdDt	Trade_Date	TrdDt="2021-03-18"	Trade date
AllocRpt@TrdTyp	Trade-Type,AvgPriceB	trdTyp="51"	TrdTyp with 51 is considered as Averageprice trade in Calypso Calypso mapping with Trade-Type is used to capture TradeType in keyword.

Transaction report Mapping

```

1  <?xml version="1.0" encoding="UTF-8" ?>
2  <FIXML xmlns="www.eurexchange.com/etdtechnology">
3    <TrdCaptRpt RptID="1638870000000001" TransType="4" RptTyp="6" TrdTyp="0" TrdMandInat="0" TransRan="020" RptRefID="2438870000000000" MchID="545" LastQty="1967" LastPx="135.1" Ccy="EUR" LastMkt="XEUR" TrdDt="2021-03-18"
4    BidDt="2021-03-19" MktRptTyp="1" LastUpdateTm="2021-03-19T13:49:50.007+00:00">
5      <Sdr SID="BCAG" IID="CALXV" Sct="2021-03-19T13:49:50.049+00:00">
6        <Pcy ID="CALXV" B="4"/>
7        <Pcy ID="CALXV" B="1"/>
8        <Pcy ID="AI" B="38"/>
9        <Pcy ID="SIMDUI" B="12"/>
10       <Pcy ID="CALXVSMDUI" B="11"/>
11       <Pcy ID="CALXV" B="96"/>
12       <Instrmt Sys="FURN" Mkt="202104"/>
13       <TrdRegTS TS="2021-03-19T13:09:24.870+00:00" Typ="7"/>
14       <TrdRegTS TS="2021-03-19T13:09:24.804+00:00" Typ="1"/>
15       <TrdRegTS TS="2021-03-19T13:09:24.818+00:00" Typ="2"/>
16       <RptSide Side="B" TrdID="2468800" PosRef="0" TstID="1001" AllocInd="B" AggrInd="B" OrdCat="1" CustOrdMdlInat="B">
17         <TrdRegTS TS="2021-03-19T13:09:24.804+00:00" Typ="8"/>
18         <Qty Typ="TOT" Long="1818" Short="2110"/>
19         <Qty Typ="ALL" Long="115" Short="0"/>
20         <Qty Typ="Bd" Long="10" Short="1967"/>
21         <TrdRptOrdDetl OrdID="1616136300144003209" OrdTyp="2" OrdStat="2">
22           <OrdQty Qty="1967"/>
23         </TrdRptOrdDetl>
24       <RptSide>
25       </TrdCaptRpt>
26     </FIXML>
27

```

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
AllocRpt/Instrmt@ContractDate	ContractPromptMonth_Date	ContractDate="20220615"	PromptMonth (i.e. Contract Month)
TrdCaptRpt/Instrmt@MMY	PromptMonth_Date		PromptMonth (i.e., Contract Month)
TrdCaptRpt/Instrmt@OptAt	ETO_SVN	OptAt="0"	ETO_SVN mapping will check serial number on ETO product.
TrdCaptRpt/Instrmt@PutCall	OptionType,TradeType	PutCall="0"	OptionType is mapped to identify whether it is call or put Option (ref Type name OptionType for value mapping) TradeType is used to identify whether it is Option or future, in EUREX there is no separate field to specify whether it is

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
			future or option, if TradeType in TypeName is not mapped specifically for Option then it will be considered as option and if the value do not match then it will be considered as future (refer Type name mapping for TradeType for more details)
TrdCaptRpt/Instrmt@StrkPx	StrikePrice	StrkPx ="164.000"	Strike price
TrdCaptRpt/Instrmt@Sym	ClearingExchangeTicker	Sym="FGBM"	Standard Contract : Clearing Exchange ticker Refer LegalEntity Mapping for additional Mapping's information
TrdCaptRpt/Instrmt@ProdCmplx	ElectronicExchangeTicker	Sym="AXA8"	Flexible Contract: Electronic Exchange Ticker Refer LegalEntity Mapping for additional Mapping's information
TrdCaptRpt/Pty[R=11]@ID	SalesPerson		Sales
TrdCaptRpt/Pty[R=12]@ID	TraderName		Trader
TrdCaptRpt/Pty[R=38]@ID	Account	<Pty ID="A1" R="38"/>	Counterparty Account
TrdCaptRpt/Pty[R=96]@ID	TakeUpBroker	<Pty ID="CAEXV" R="96"/>	When trade is execution only for certain member id, then Map the Type name TradeAction as a third combination lookup of this field mapping
TrdCaptRpt/RptSide/TrdRptOrdDetl@OrdID	OrderId	OrdID="1616136300144003209"	Used to capture trade keyword

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
TrdCaptRpt/RptSide@PosEfct	OpenClose	PosEfct="O"	Used to capture trade keyword
TrdCaptRpt/RptSide@Side	BuySellDirection	Side="2"	Direction whether it is buy or sell (ref Type name BuySellDirection for value mapping)
TrdCaptRpt/RptSide@Txt1	SubAccount		Used to capture trade keyword
TrdCaptRpt/RptSide@Txt2	ClientRef	Txt2="1001"	Client account
TrdCaptRpt/TrdRegTS[Typ=1]@TS	TS_Trade_Datetime	<TrdRegTS TS="2021-03-19T13:09:24.870+00:00" Typ="1"/>	Trade date and time along with TradeCutOffTime logic (Refer Trade cutoff time below for more details)
TrdCaptRpt/TrdRegTS[Typ=2]@TS	CCPClearedDatetime	<TrdRegTS TS="2021-03-19T13:09:24.870+00:00" Typ="2"/>	Used to capture trade keyword
TrdCaptRpt/TrdRegTS[Typ=7]@TS	TS1_Trade_Datetime	<TrdRegTS TS="2021-03-19T13:09:24.870+00:00" Typ="7"/>	Trade date and time for Merged trade along with TradeCutOffTime logic (Refer Trade cutoff time below for more details)
TrdCaptRpt@BizDt	Run_Date	BizDt="2021-03-18"	Used to capture trade keyword
TrdCaptRpt@Ccy	Currency	Ccy="EUR"	Trade currency
TrdCaptRpt@LastMkt	Exchange	LastMkt="XEUR"	Exchange Short name (refer Type name LegalEntity for further value mapping)
TrdCaptRpt@LastPx	PricePremium	LastPx="169.98"	Trade price
TrdCaptRpt@LastQty	Quantity	LastQty="52"	Quantity
TrdCaptRpt@RptID	ExternalReference	RptID="262PMC7000000000"	"ExternalReference" especially used in calypso mapping to

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
			refer external id to apply New action
TrdCaptRpt@RptRefID	ExtRef, CCPRptRefID	RptRefID="262PMC70000000000"	"ExtRef" especially used in calypso mapping to refer external id to apply amend/cancel action. "CCPRptRefID" is used to capture in the keyword. This mapping also enables additional mapping to search parent trade and amend trades. for additional details refer Amendment Lookup section.
TrdCaptRpt@TransTyp	TransactionType	TransTyp="4"	First combination Lookup of TradeAction (Refer Type Name TradeAction for more detailed explanation
TrdCaptRpt@TrdDt	TS_Trade_Date	TrdDt="2021-03-19"	Trade Date will be picked from TrdDt and time will be picked from Calypso value mapping TS_Trade_Datetime when certain transfer reason is added in Type name TradeDateTimeAdjustment
TrdCaptRpt@TrdPubInd	TradePublishIndicator	TrdPubInd="2"	This field will be present flexible contract is traded.
TrdCaptRpt@TrdTyp	Trade-Type	TrdTyp="0"	Used to capture trade keyword
TrdCaptRpt@TrnsfrRsn	TransferReason,AvgPriceB, ReportType	TrnsfrRsn="020"	Second combination Lookup of TradeAction (Refer Type Name TradeAction for more detailed explanation AvgPriceB is mapping is used to capture the trade with

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
			average price trade when Transfer reason is 011 (refer Type name AvgPriceB for value mapping). “ReportType” – is used to capture in Tradekeyword, this mapping also enables additional mapping to search parent trade and amend trades. for additional details refer Amendment Lookup section.

RTN trade keyword is set as: <trade date> + <ContractSymbol trade keyword> + <CIOrdID2 trade keyword> + <TradeTypeCode trade keyword>.

The trade date comes from the TrdDt field, the ContractSymbol trade keyword comes from the Sym field, the CIOrdID2 trade keyword comes from the CIOrdID2 field, the TradeTypeCode trade keyword comes from the TrdTyp field.

UTI-ETDCpty/Tradeld = <UTIPrefix> + <UTIValue>

UTIPrefix = 529900LN3S50JPU47S06 (hard-coded)

UTIValue = T + <RptId> + <C for clearing or T otherwise>

Position Management Report Mapping

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <FIXML xmlns="www.eurexchange.com/technology">
3  <PosMntRpt RptID="261DEB4000000000" TxnTyp="1" Actn="1" Stat="3" TrnsfrRsn="114" BizDt="2021-03-16" Coy="EUR" TxnTm="2021-03-15T07:48:13.306+00:00" Txt2="1001" ExtMethod="M" PosID="M0YL7">
4    <Hdr SID="ECAG" IID="CALXV" Sct="2021-03-15T07:48:13.363+00:00"/>
5    <Pty ID="CALXV" R="1"/>
6    <Pty ID="A1" R="38"/>
7    <Pty ID="SIM001" R="12"/>
8    <Instrmt Sym="OGBL" MMT="202104" StrkFx="165" OptAt="0" PutCall="1"/>
9    <Qty Typ="AS" Short="25"/>
10   <Qty Typ="TOT" Long="0" Short="0"/>
11   <Qty Typ="ALC" Long="0" Short="0"/>
12   <Qty Typ="PA" Long="0" Short="-25"/>
13 </PosMntRpt>
14 </FIXML>

```

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
PosMntRpt/Hdr@SID	Exchange	SID="ECAG" & "ECC"	in Eurex position Management report will not be content with Eurex field in fixml therefore SID field value is considered to mapping as

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
			Exchange in Calypso, Exchange Short name (refer Type name LegalEntity for further value mapping)
AllocRpt/Instrmt@ContractDate	ContractPromptMonth_Date	ContractDate="20220615"	PromptMonth (i.e. Contract Month)
PosMntRpt/Instrmt@MMY	PromptMonth_Date		PromptMonth (i.e., Contract Month)
PosMntRpt/Instrmt@OptAt	ETO_SVN	OptAt="0"	ETO_SVN mapping will check serial number on ETO
PosMntRpt/Instrmt@PutCall	OptionType,TradeType	PutCall="0"	OptionType is mapped to identify whether it is call or put Option (ref Type name OptionType for value mapping) product. TradeType is used to identify whether it is Option or future, in EUREX there is no separate field to specify whether it is future or option, if TradeType in TypeName is not mapped specifically for Option then it will be considered as option and if the value do not match then it will be considered as future (refer Type name mapping for TradeType for more details)
PosMntRpt/Instrmt@StrkPx	StrikePrice	StrkPx ="164.000"	Strike price

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
PosMntRpt/Instrmt@Sym	ClearingExchangeTicker	Sym="FGBM"	Standard Contract : Clearing Exchange ticker Refer LegalEntity Mapping for additional Mapping's information
PosMntRpt/Instrmt@ProdCmplx	ElectronicExchangeTicker	Sym="AXA8"	Flexible Contract: Electronic Exchange Ticker Refer LegalEntity Mapping for additional Mapping's information
PosMntRpt/Pty[R=38]@ID	Account	<Pty ID="A1" R="38"/>	Counterparty Account
PosMntRpt/Qty[Typ=AS]@Typ	Action	Qty Typ="AS" Short="25"/>	TradeAction for assignment
PosMntRpt/Qty[Typ=PA]@Long	LongQuantity	<Qty Typ="PA" Long="-25" Short="0"/>	Quantity and Direction
PosMntRpt/Qty[Typ=PA]@Short	ShortQuantity	<Qty Typ="PA" Long="0" Short="-25"/>	Quantity and Direction
PosMntRpt/Qty[Typ=TRF]@Typ	Action	Qty Typ="TRF" Short="25"/>	TradeAction for Transfer (NEW)
PosMntRpt/Qty[Typ=TX]@Typ	Action	Qty Typ="TX" Short="25"/>	TradeAction for Exercise
PosMntRpt@BizDt	Run_Date	BizDt="2021-03-18"	Used to capture trade keyword
PosMntRpt@Ccy	Currency	Ccy="EUR"	Trade currency
PosMntRpt@RptID	ExternalReference	RptID="262PMC700000000000"	"ExternalReference" especially used in calypso mapping to refer external id to apply New action
PosMntRpt@TrnsfrRsn	TransferReason		Used to capture trade keyword

Interface Value	Calypso Value	Eurex fixml Sample Field	Description
PosMntRpt@TxnTm	Trade_Datetime		This mapping takes trade date and time from same field but it does not consider TradeCutOffTime logic
PosMntRpt@Txt2	ClientRef		Client account

UTI-ETDCpty/TradeId = <UTIPrefix> + <UTIValue>

UTIPrefix = 529900LN3S50JPU47S06 (hard-coded)

UTIValue = P + <PosID> + <C for clearing or T otherwise>

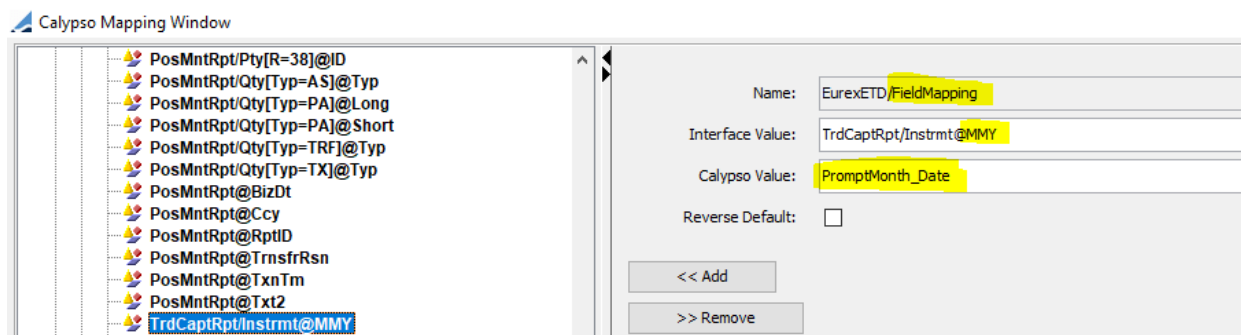
Expiry Date and Prompt Month Validation

Prompt Month is populated from ContractPromptMonth_Date field if TrdCaptRpt/Instrmt@ContractDate mapping is configured, otherwise it is populated from PromptMonth_Date if TrdCaptRpt/Instrmt@MMY mapping is configured, or from the Expiration_Date otherwise.

Interface Name = EurexETD/FieldMapping

Interface Value = TrdCaptRpt/Instrmt@ContractDate

Calypso Value = ContractPromptMonth_Date



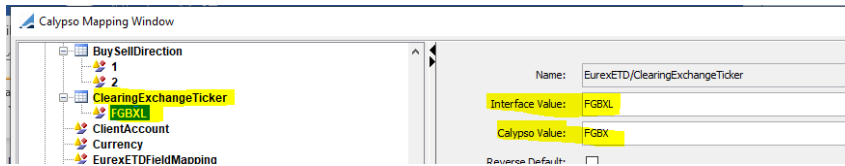
Interface Name = EurexETD/FieldMapping

Interface Value = TrdCaptRpt/Instrmt@MMY

Calypso Value = PromptMonth_Date

4.3 ClearingExchangeTicker / ElectronicExchangeTicker

The symbol of the product code is different in Fixml file than what Calypso contract setup has, then through the below calypso mapping we can map the value.



Example: fixml file send from EUREX is FGBXL and in Calypso the clearing exchange ticker is setup as FGBX then one can map the Eurex sym with Clearingexchangeticker as stated in sanp to receive the trade successfully in calypso.

When ElectronicExchangeTicker is configured in the mapping as below, and found in the input file, ClearingExchangeTicker is ignored.

Name = EurexETD/FieldMapping

Interface Value = AllocRpt/Instrmt@ProdCmplx

Calypso Value = ElectronicExchangeTicker

Name = EurexETD/FieldMapping

Interface Value = TrdCaptRpt/Instrmt@ProdCmplx

Calypso Value = ElectronicExchangeTicker

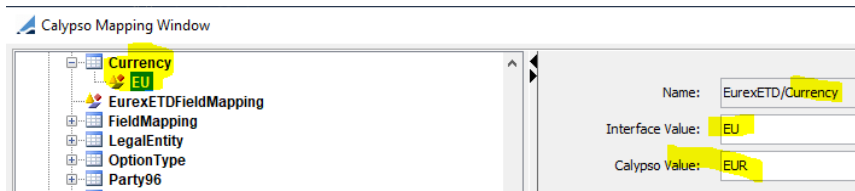
Name = EurexETD/FieldMapping

Interface Value = PosMntRpt/Instrmt@ProdCmplx

Calypso Value = ElectronicExchangeTicker

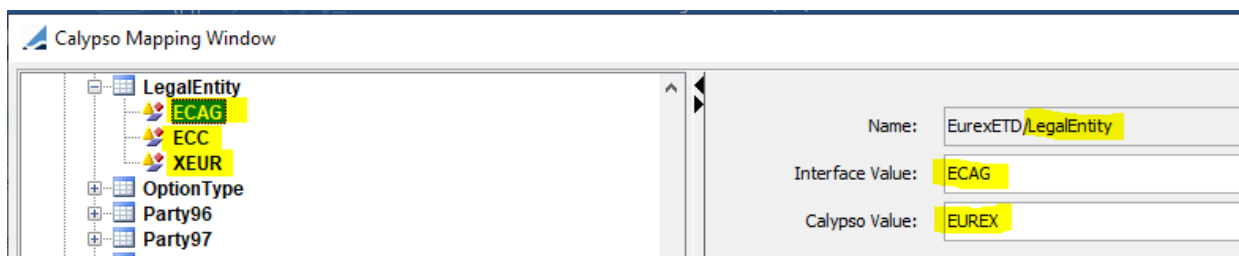
4.4 Currency

If the currency code is different in fixml than the Calypso currency code then user can map the values for those currencies in calypso mapping.



4.5 LegalEntity

If the Exchange name is different in fixml than the calypso exchange legal entity short name, then user can map the value for those particular Exchange code as below:



Interface Value = ECAG / ECC / XEUR

Calypso Value = EUREX

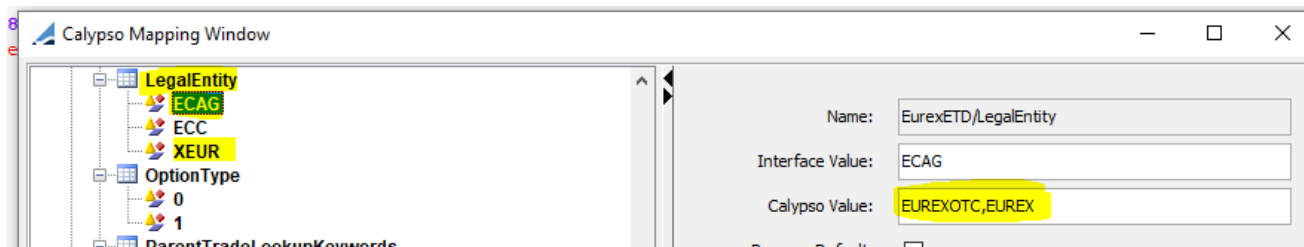
Note: For ClearingExchangeTicker, Currency & LegalEntity - If the CP and calypso values are same then no need to map values, it will process straight through.

Mapping not required	
AUD	AUD
IR	IR
EUREX	EUREX

Multiple CCPs can be set as follows

In Eurex fixml message, Standard and flexible contract exchange value is provided as "XEUR" wherein in Calypso "EUREX" – LegalEntity is setup for Standard product and "EUREXOTC" – LegalEntity is setup for Flexible contract.

By mapping the below, it will enable to capture correct Exchange short code (LegalEntity) and process the trade in Calypso.



The first legal entity "EUREXOTC" uses ElectronicExchangeTicker (if configured) to look up the product.

Otherwise, the second legal entity "EUREX" uses ClearingExchangeTicker to look up the product.

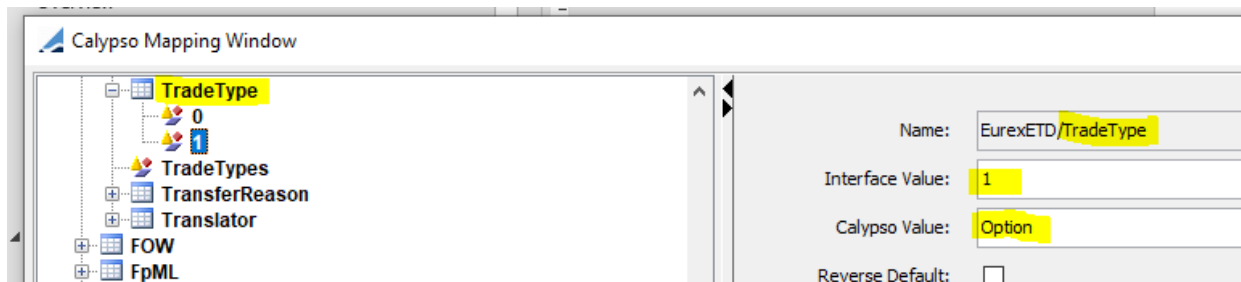
Interface Value	Calypso value
ECAG	EUREXOTC,EUREX
XEUR	EUREXOTC,EUREX

4.6 TradeType

TradeType is used to identify whether the fixml message is coming for future or option, in EUREX there is separate field to specify whether it is future or option, so in FieldMapping TradeType type name is added to fixml field mapping Instrmt@PutCall

if this field is available in EUREX with value 0 or 1 then it will be considered as Option and if this field itself is not available then fixml message is considered as Future.

Below is the mapping as follows:



Interface Value = 0 / 1

Calypso Value = Option

4.7 OptionType

Eurex fixml file specifies the Option type from different field and values, which needs to be mapped as below.



Interface Value = 0

Calypso Value = CALL

Interface Value = 1

Calypso Value = PUT

4.8 BuySellDirection

4.8.1 Method 1

One field in fixml file determines whether it is buy or sell, then follow the below mapping.



Interface Value = 1

Calypso Value = BUY

Interface value = 2

Calypso Value = SELL

4.8.2 Method 2

In Eurex position Management report, Qty with Typ PA section indicates the direction and quantity with negative and positive sign aggregation of both long and short.

Mappings are directly handled through field mapping, therefore there is no need of separate type name configuration.

Interface Value = PosMntRpt/Qty[Typ=PA]@Long

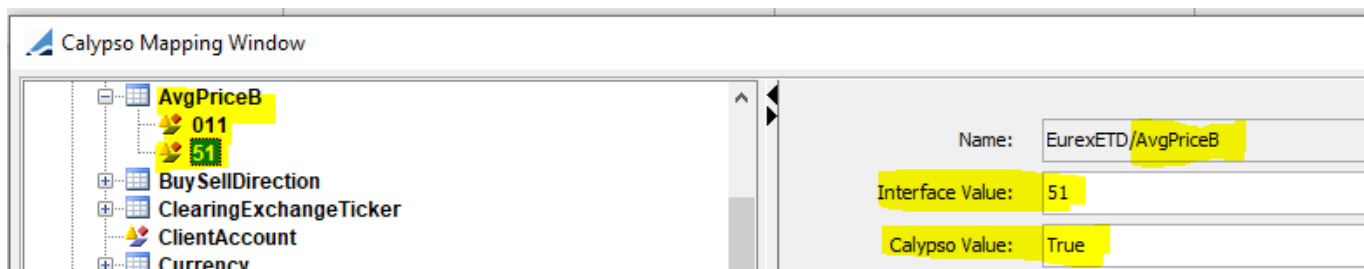
Calypso Value = LongQuantity

Interface Value = PosMntRpt/Qty[Typ=PA]@Short

Calypso Value = ShortQuantity

4.9 AvgPriceB

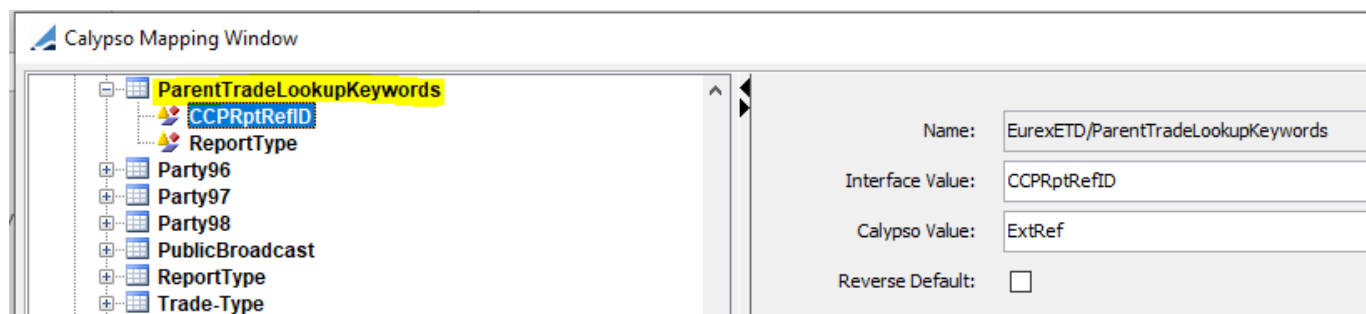
When Fixml message is received with transfer reason 011 in trade confirmation and trdtyp 51 in allocation report which means it is a Merge trade and this trade will carry trade price with 7 decimal places, the below mapping required to enable the average price flag and accept the trade with entire trade price in Calypso.



4.10 Amendment Lookup

Eurex sends Allocation report for give-up and take-up with same external reference id, in order to calypso to understand to amend correct trade with keywords, the following mapping is required.

The amendment primary lookup is to check parent trade is combination of ExtRef & RptTyp of parent trade if both matches then it will amend the trade, if it does not match then it will look up with ExternalReference & RptTyp of amendment trade, if it matches then it will amend the trade.



The screenshot shows the 'Calypso Mapping Window' with a tree view on the left and a mapping table on the right. The tree view has 'ParentTradeLookupKeywords' selected, which contains 'CCPRptRefID' and 'ReportType'. The mapping table on the right shows the following configuration:

Name:	EurexETD/ParentTradeLookupKeywords
Interface Value:	CCPRptRefID
Calypso Value:	ExtRef
Reverse Default:	☐

Interface value = CCPRptRefID

Calypso value = ExtRef

Interface Value = ReportType

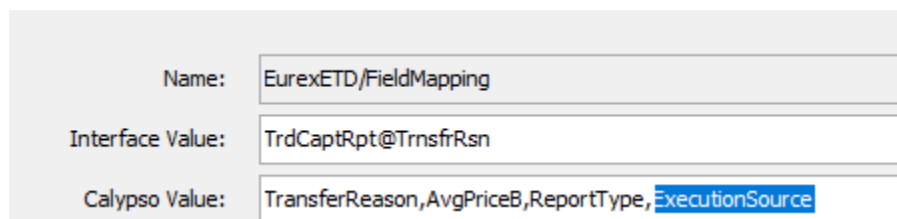
Calypso Value = AllocType

Copying Trade Keywords from Take-up

To identify the take-up trade separately in Calypso application, add the below attribute.

Interface Value = TrnsfrRsn

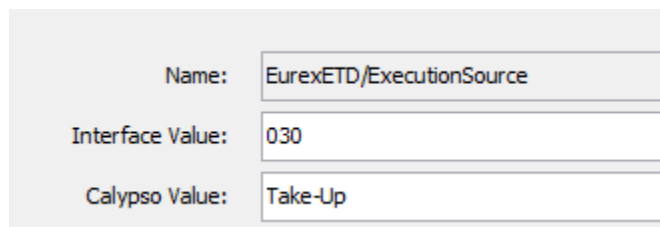
Calypso Value = ExecutionSource



The screenshot shows the 'Calypso Mapping Window' with the following configuration:

Name:	EurexETD/FieldMapping
Interface Value:	TrdCaptRpt@TrnsfrRsn
Calypso Value:	TransferReason,AvgPriceB,ReportType,ExecutionSource

Add type name ExecutionSource with Interface Value = 030 and Calypso Value = Take-Up:



The screenshot shows the 'Calypso Mapping Window' with the following configuration:

Name:	EurexETD/ExecutionSource
Interface Value:	030
Calypso Value:	Take-Up

TradeKeywordsAbbreviated:

To capture only abbreviated keyword, follow the below mapping and it will not feed non-abbreviated keywords from same fixml field.

Name:	EurexETD/TradeKeywordsAbbreviated
Interface Value:	ExecutionSource
Calypso Value:	ExecutionSource

When a NEW message is received after a CANCEL message, the mapping CopyKeywordsLookupForNew determines the criteria to lookup the cancel message to copy the trade keywords to the new trade.

When a CANCEL message is received after a NEW message, the mapping CopyKeywordsLookupForCancel determines the criteria to lookup the new message to copy the trade keywords to the new trade.

Example:

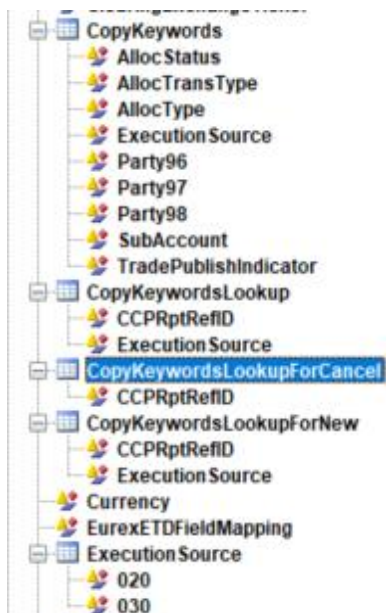
Name:	EurexETD/CopyKeywordsLookupForNew
Interface Value:	CCPRptRefID
Calypso Value:	CCPRptRefID

Name:	EurexETD/CopyKeywordsLookupForNew
Interface Value:	ExecutionSource
Calypso Value:	CONSTANT =Take-Up

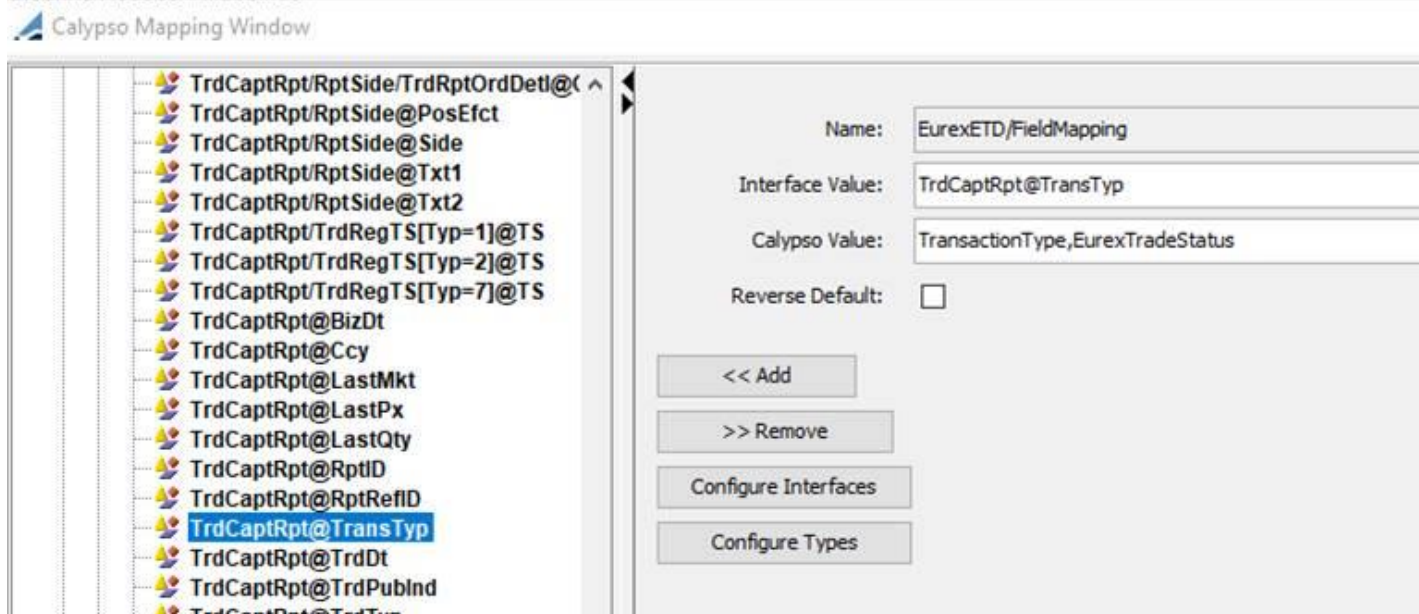
Name:	EurexETD/CopyKeywordsLookupForCancel
Interface Value:	CCPRptRefID
Calypso Value:	CCPRptRefID

CopyKeywords

The trade keywords defined in this domain are copied to the new trade.



You can also allow source trade to be treated as unique while duplicating keywords.

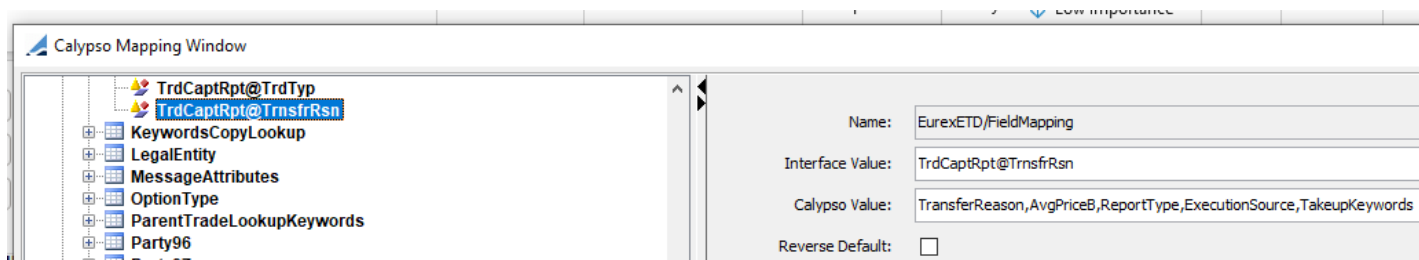


In field Mapping, add an extra Calypso value named EurexTradeStatus as well as TakeupKeywords.

EurexETD/FieldMapping

Interface Value: TrdCaptRpt@TransTyp

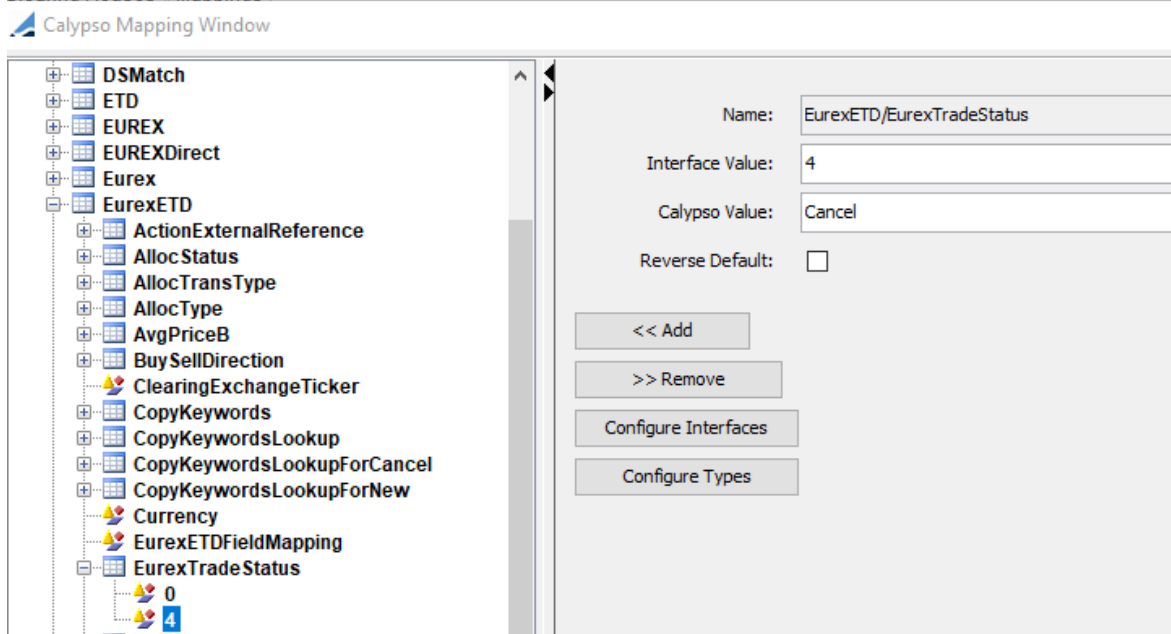
Calypso: TransactionType,EurexTradeStatus



Interface Value = TrdCaptRpt@TrnsfrRsn

Calypso = TransferReason,AvgPriceB,ReportType,ExecutionSource,TakeupKeywords

To abbreviate the EurexTradeStatus field's value, add the following mapping:



Configure new Types = EurexTradeStatus

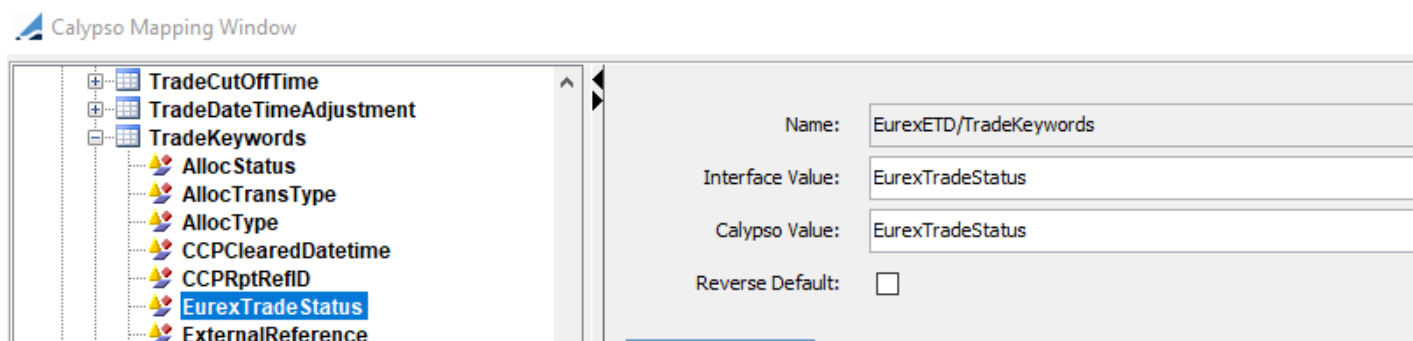
Interface Value = 0

Calypso value = New

Interface Value = 4

Calypso value = Cancel

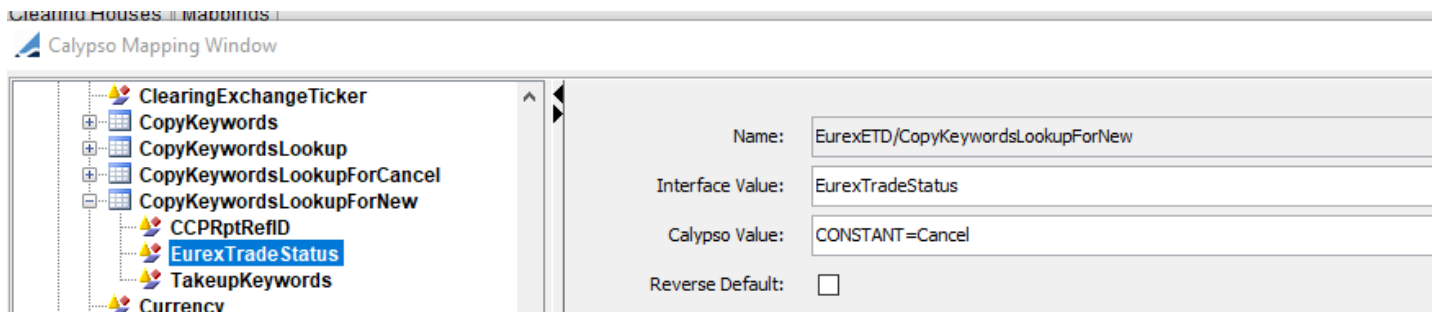
EurexTradeStatus added to Tradekeywords



Interface Value = EurexTradeStatus

Calypso Value = EurexTradeStatus

Copy keyword lookup mappings



Added an extra level of second-level search to determine which source trade is unique to copy keywords.

EurexETD/CopyKeywordsLookupNew

Interface Value = EurexTradeStatus

Calypso Value = Cancel



Added an extra level of third-level search to determine which source trade is unique to copy keywords.

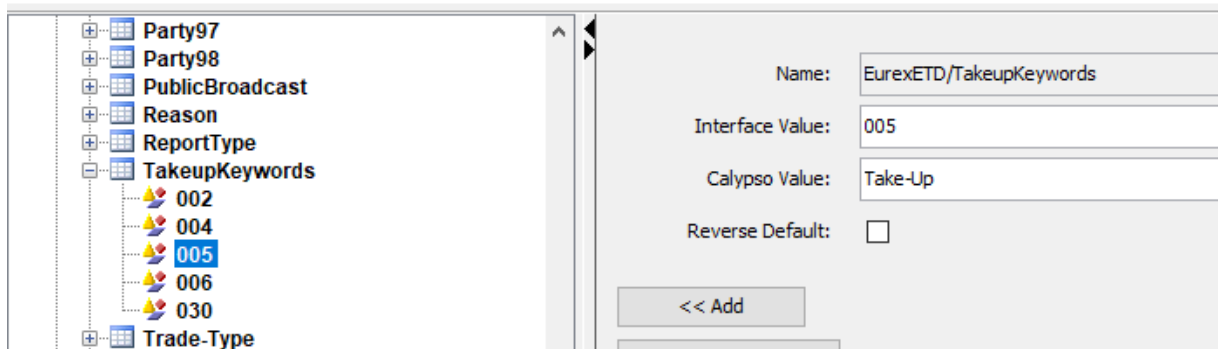
EurexETD/CopyKeywordsLookupNew

Interface Value = TakeupKeywords

Calypso Value = CONSTANT=Take-Up

To abbreviate the TakeupKeywords field's value, add the following mapping:

Calypso Mapping Window



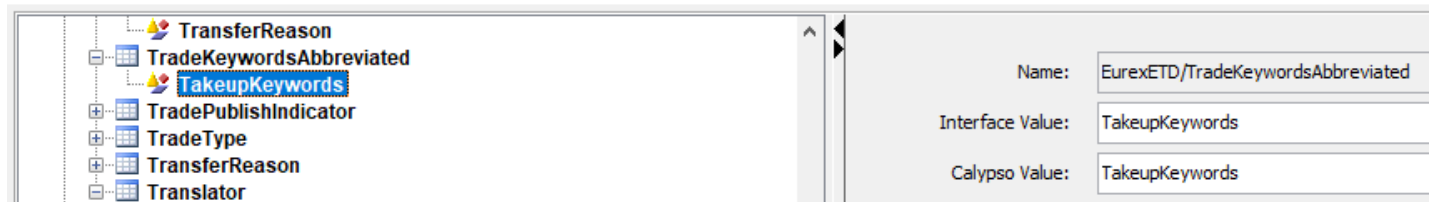
Add third level of lookup

Interface Value	Calypso Value
030	Take-Up
006	Take-Up
002	Take-Up
004	Take-Up
005	Take-Up
011	Take-Up
012	Take-Up
013	Take-Up

Added Interface values with transfer reason, which can occur after take-up, but you can add additional transfer reasons if you are doing anything other than above to copy keywords.

TakeupKeywords added to TradeKeywordsAbbreviated

Calypso Mapping Window



Interface Value	Calypso Value
TakeupKeywords	TakeupKeywords

Cancel/Refused TakeUp

When clearing member initiates Give-up from C7, the take-up member receives an allocation message on their queue and same is captured in Bo Message report with Msg status "Pending" or "Reprocessing".

If the take-up member reject or give-up member cancel the give-up trade, the take-up member side allocation message will automatically move into canceled status in BO message report.

stat = 10 (refused) or 12 (canceled) and rpttyp = 16.

You need to add the following workflow transitions to the INCOMINGFEEDMSG message workflow:

REPROCESSING – CANCEL – CANCELED

PENDING – CANCEL – CANCELED

The following mappings determine the CANCEL action:

Name = EurexETD/TakeUpRefuseAndCancelLookup

Interface Value = ExtRef

Calypso Value = ExtRef

Name = EurexETD/TakeUpRefuseAndCancelLookup

Interface Value = ID2

Calypso Value = ID2

Name = EurexETD/MessageAction

Interface Value = 1016

Calypso Value = CANCEL

Name = EurexETD/MessageAction

Interface Value = 1216

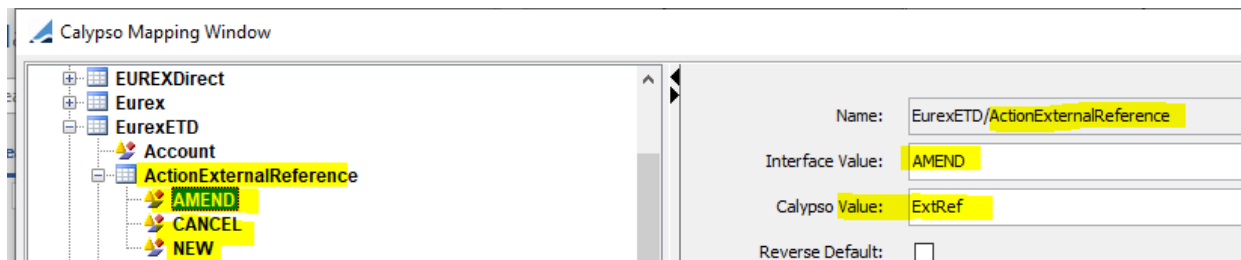
Calypso Value = CANCEL

4.11 ActionExternalReference

In Eurex RptID and RptRefID are sent in fixml message, RptID determines versioning of trade and Parent Id details on RptRefID

In order to calypso to understand which field needs to be considered as external reference while Amend/cancel and which field needs to be considered for external reference when New trade, the below mapping is required once the field mappings are mapped.

In Trade capture report, "ExternalReference" is mapped with field RptID and ExtRef with RptRefID (refer field mappings)



Interface value = AMEND

Calypso value = ExtRef

Interface value = CANCEL

Calypso value = ExtRef

Interface value = NEW

Calypso value = ExternalReference

4.12 TradeAction

Actions on the trade are mapped based on the type of reports (i.e.Tag) which Eurex sends in fixml message.

4.12.1 TrdCaptRpt - Trade Capture Report

In Trade capture report, the trade action is decided based on combination of TransType, Transfer Reason and Partyrole id 96.



Interface value	Calypso value
0000	NEW
0002	NEW
0004	NEW
0005	NEW
0006	NEW
0007	NEW
0010	NEW

0011	NEW
0012	NEW
0013	NEW
0018	NEW
0020	NEW
0030	NEW
0035	NEW
0040	NEW
0042	NEW
0131	NEW
0132	NEW
0133	NEW
4000	CANCEL
4002	CANCEL
4004	CANCEL
4005	CANCEL
4006	CANCEL
4007	CANCEL
4010	CANCEL
4011	CANCEL
4012	CANCEL
4013	CANCEL
4018	CANCEL
4020	CANCEL
4020CAEXV	AMEND
4030	CANCEL
4035	CANCEL
4040	CANCEL
4042	CANCEL
4131	CANCEL
4132	CANCEL
4133	CANCEL

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="www.eurexchange.com/technology">
3   <TrdCaptRpt RptID="263BHP70000000002" TransTyp="0" RptTyp="0" TrdTyp="0" TrdHandlInst="0" TrnsfrRsn="020" Rpt
4     BizDt="2021-03-19" MLegRptTyp="1" LastUpdateTm="2021-03-19T13:49:50.007+00:00">
5     <Hdr SID="ECAG" TID="CAEXV" Snt="2021-03-19T13:49:50.050+00:00"/>
6     <Pty ID="CALXV" R="4"/>
7     <Pty ID="CAEXV" R="1"/>
8     <Pty ID="A1" R="38"/>
9     <Pty ID="SIM001" R="12"/>
10    <Pty ID="CAEXV" R="96"/>

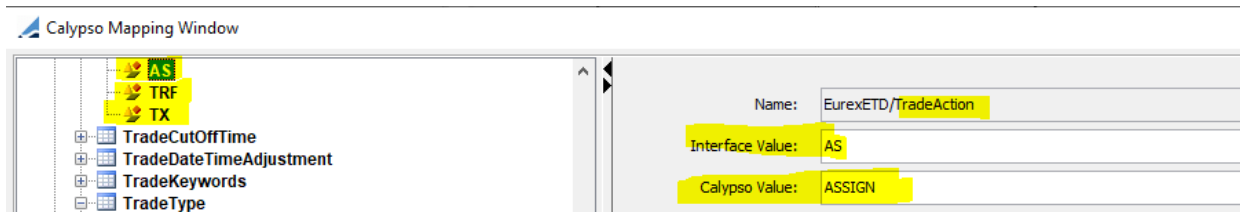
```

Example:

- In fixml file TransTyp=0 and TrnsfrRsn=020 = the mapping will be done in interface value as "0020" and calypso value will be "NEW"
- In fixml file TransTyp=4 and TrnsfrRsn=020 = the mapping will be done in interface value as "4020" and calypso value will be "CANCEL"
- If a member does execution only business, in that case user needs to add those members id along with tradeAction as a third combination lookup to amend trade instead of cancelling the trade from Calypso.
- In fixml file TransTyp=4 and TrnsfrRsn=020 and Pty ID="CAEXV" R="96" then mapping will be done in interface value as "4020CAEXV" and calypso value will be "AMEND"

4.12.2 PosMntRpt - Position Management report

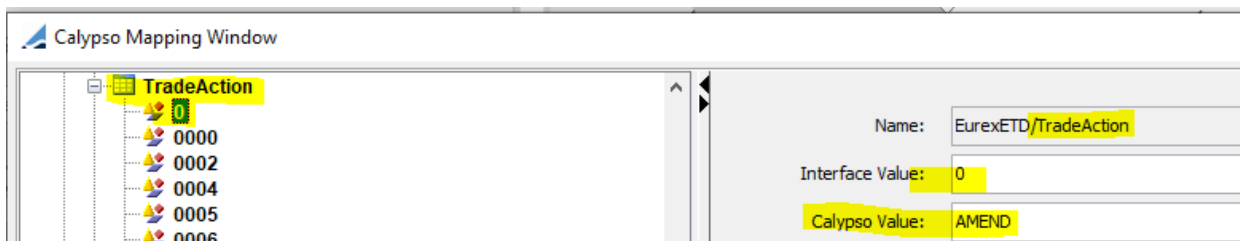
CSV uploader file is received with content of AS, TX, TRF are the trade actions for allocation Report.



Interface Value	Calypso Value
AS	ASSIGN
TRF	NEW
TX	EXERCISE

4.12.3 AllocRpt - Allocation Report

Allocation report is sent when Give-up and take-up are initiated and approved, this report will update the status of the trade which is treated in Calypso to amend the trade keywords.



Interface value	Calypso Value
0	AMEND

0	AMEND
2	AMEND
4	AMEND
7	AMEND

4.13 Trade Date and Time

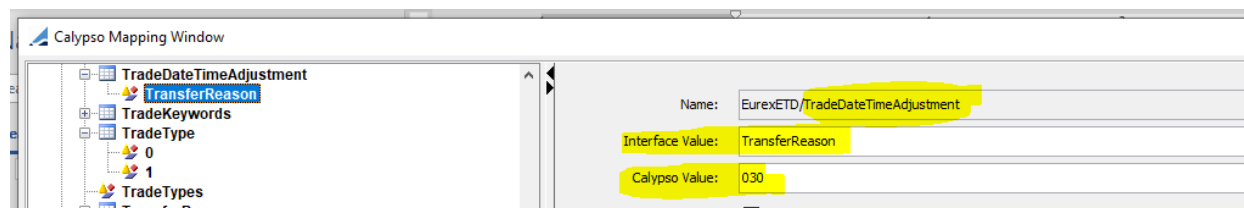
In field Mapping you have observed the different type of Calypso value Mapped against Trade date and time.

Outlined the below brief details when to configure each Calypso value to capture trade date and time and how it works.

4.13.1 TS_Trade_Date

TS_Trade_Date will helps capture trade date and time with combination of two fields from fixml file.

In fixml file TrdDt field is mapped in calypso TS_Trade_Date field mapping, it means the trade date will be picked from TrdDt field and Trade time will be picked from TS_Trade_Datetime, TS1_Trade_Datetime, TS2_Trade_Datetime and so on. Based on sequence of version (TS(n)_Trade_Datetime). This mapping is specifically work when Type name TradeDateTimeAdjustment is mapped with specific Transfer reason and for the rest of the transfer reason it is pick from trade date and time from TS(n)_Trade_Datetime



You can add multiple transfer reason by comma separation such as 030,020,011 and so on... if required.

4.13.2 TS(n)_Trade_Datetime

When calypso value mapping TS(n)_Trade_Datetime is mapped , the fixml field date & time value will be considered from same field but also consider TradeCutOffTime logic (refer to Trade CutOff time Logic section for More details on configuration).

4.13.3 Trade_Datetime

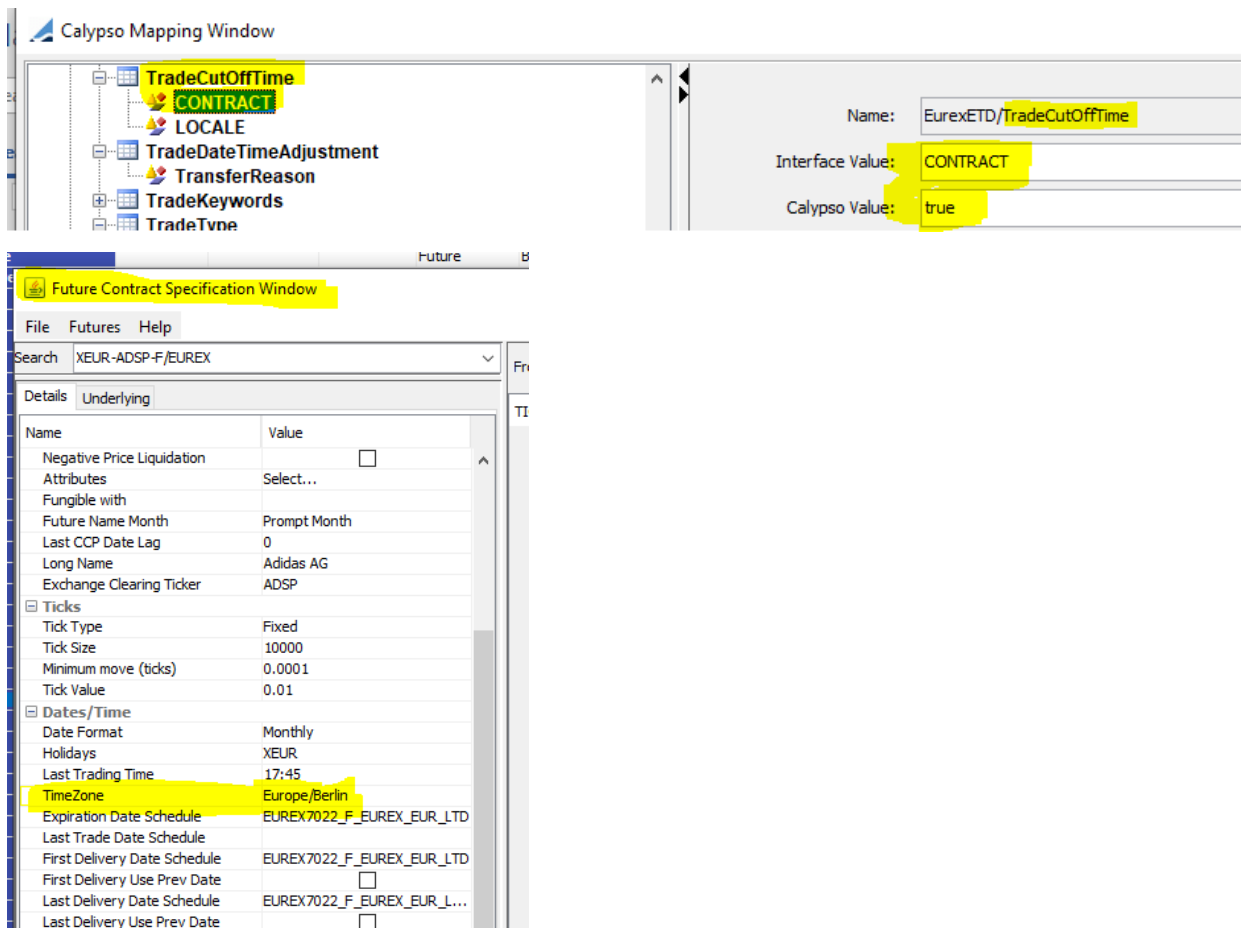
When calypso value mapping Trade_Datetime is mapped, the fixml field date & time value will be considered from same field but without TradeCutOffTime logic.

4.14 TradeCutOffTime

In Calypso the default time which 24 o'clock will be considered as market closeout time and if any trade comes with trade date example 25-03-2021 after 24 hours i.e., 00:01 hr then the trade date will automatically be moved to next business day but Calypso don't understand actual market wise exchange cutoff time.

To allow Calypso to understand the Exchange cutoff time the following configuration needs to be setup.

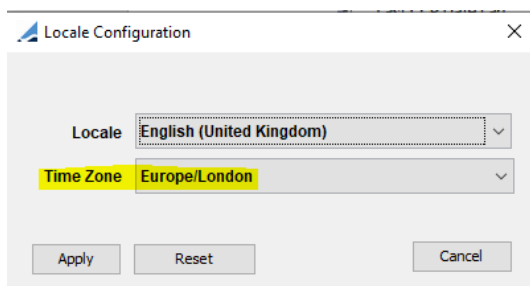
4.14.1 Calypso Mapping



The screenshot shows two windows from the Calypso application. The top window, 'Calypso Mapping Window', displays a tree view on the left with nodes like 'TradeCutOffTime', 'CONTRACT', 'LOCALE', 'TradeDateTimeAdjustment', 'TransferReason', 'TradeKeywords', and 'TradeTyme'. On the right, a configuration panel shows 'Name: EurexETD/TradeCutOffTime', 'Interface Value: CONTRACT', and 'Calypso Value: true'. The bottom window, 'Future Contract Specification Window', shows a search for 'XEUR-ADSP-F/EUREX' and a table of contract details. The 'TimeZone' field is highlighted with the value 'Europe/Berlin'.

Name	Value
Negative Price Liquidation	☐
Attributes	Select...
Fungible with	
Future Name Month	Prompt Month
Last CCP Date Lag	0
Long Name	Adidas AG
Exchange Clearing Ticker	ADSP
Ticks	
Tick Type	Fixed
Tick Size	10000
Minimum move (ticks)	0.0001
Tick Value	0.01
Dates/Time	
Date Format	Monthly
Holidays	XEUR
Last Trading Time	17:45
TimeZone	Europe/Berlin
Expiration Date Schedule	EUREX7022_F_EUREX_EUR_LTD
Last Trade Date Schedule	
First Delivery Date Schedule	EUREX7022_F_EUREX_EUR_LTD
First Delivery Use Prev Date	☐
Last Delivery Date Schedule	EUREX7022_F_EUREX_EUR_L...
Last Delivery Use Prev Date	☐

In TradeCutOffTime If **CONTRACT = true**, then PO attribute cutoff time which is set will be considered as CONTRACT TimeZone based time.



The screenshot shows the 'Locale Configuration' window. It has two dropdown menus: 'Locale' set to 'English (United Kingdom)' and 'Time Zone' set to 'Europe/London'. There are 'Apply', 'Reset', and 'Cancel' buttons at the bottom.

If **LOCALE = true**, then PO attribute cutoff time which is set will be considered as LOCALE Configuration TimeZone based time.

Note: Keep One Interface value in Calypso value as true.

4.14.2 PO Attributes

On the below example "Setclear" is PO, in this PO add attribute Type and value as per below logic.

Prefix the Attribute Type with MIC code and Interface Name which is "EurexETD" followed by ".TradeCutOffTime"

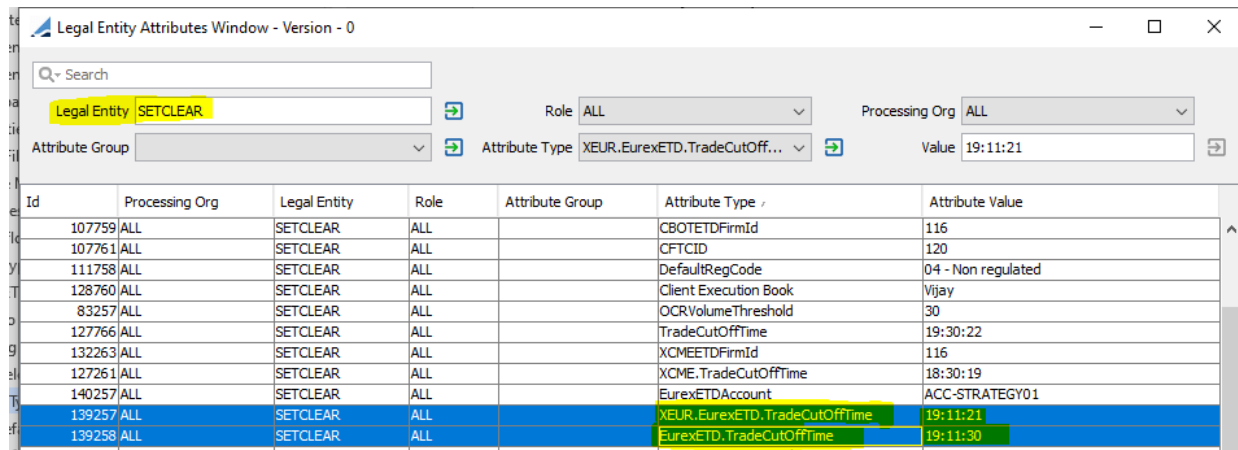
With MIC prefix – the cutoff time will be considered specific to that exchange.

Example: XEUR.EurexETD.TradeCutOffTime

Without MIC code prefix – the cutoff time will be considered for all exchange specific to that Interface name “EurexETD”

Example: EurexETD.TradeCutOffTime

Attribute value is a time which needs to be expressed in hh:mm:sss i.e., 19:11:30



Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
107759	ALL	SETCLEAR	ALL		CBOTETDFirmId	116
107761	ALL	SETCLEAR	ALL		CFTCID	120
111758	ALL	SETCLEAR	ALL		DefaultRegCode	04 - Non regulated
128760	ALL	SETCLEAR	ALL		Client Execution Book	Vijay
83257	ALL	SETCLEAR	ALL		OCRVolumeThreshold	30
127766	ALL	SETCLEAR	ALL		TradeCutOffTime	19:30:22
132263	ALL	SETCLEAR	ALL		XCMEETDFirmId	116
127261	ALL	SETCLEAR	ALL		XCME.TradeCutOffTime	18:30:19
140257	ALL	SETCLEAR	ALL		EurexETDAccount	ACC-STRATEGY01
139257	ALL	SETCLEAR	ALL		XEUR.EurexETD.TradeCutOffTime	19:11:21
139258	ALL	SETCLEAR	ALL		EurexETD.TradeCutOffTime	19:11:30

4.15 “snt” Date Format

The “snt” date is the current date time. You can specify the format using the following mapping:

Name = EurexETD/CLEAR_CONNECT_PROPERTIES

Interface Value = REQUEST_DATE_FORMAT

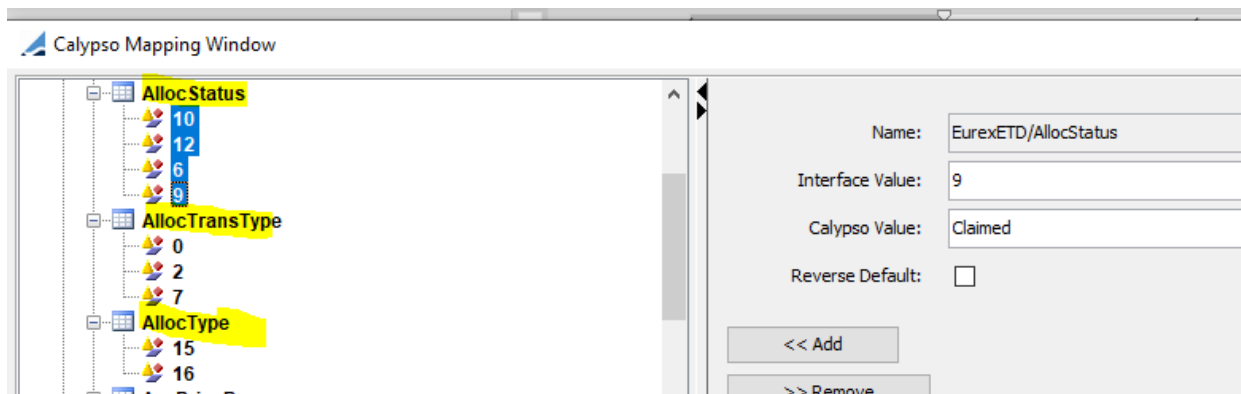
Calypso Value = <format>

Example:

Calypso Value = yyyy-MM-dd'T'HH:mm:ss.SSS

4.16 Abbreviation

Through abbreviation mapping one can store short value to abbreviated value in Trade keywords.



AllocStatus

Interface Value	Calypso value
10	Refused
12	Cancelled
6	Allocation pending
9	Claimed

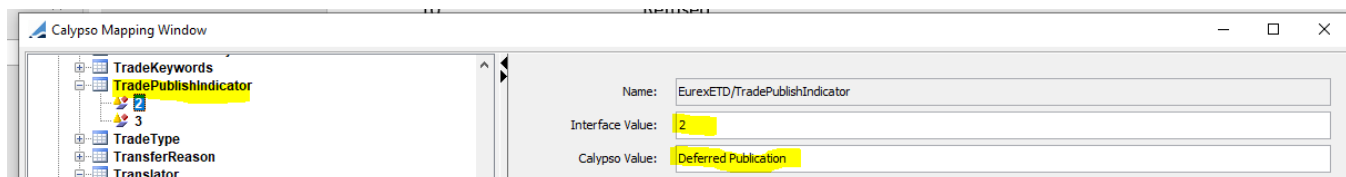
AllocTransType

Interface Value	Calypso value
0	New Give-Up Initiated
2	Cancel
7	Give-Up Restate

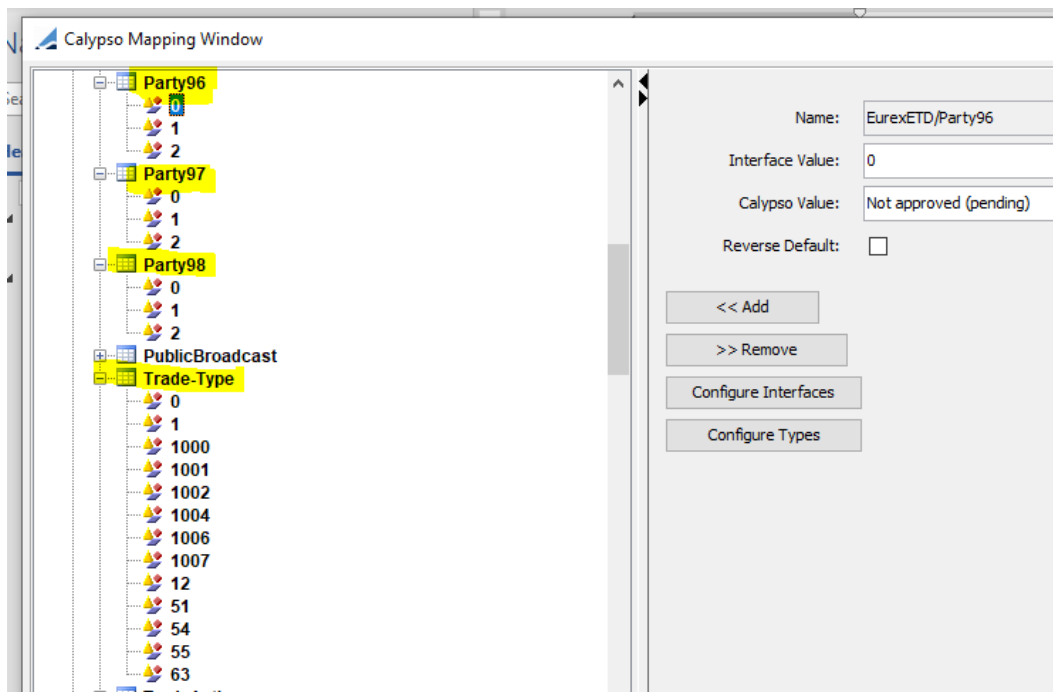
AllocType

Interface Value	Calypso value
15	Give-up
16	Take-up

TradePublishIndicator



Interface Value	Calypso value
2	Deferred Publication
3	Published



Party96, Party97 and Party98

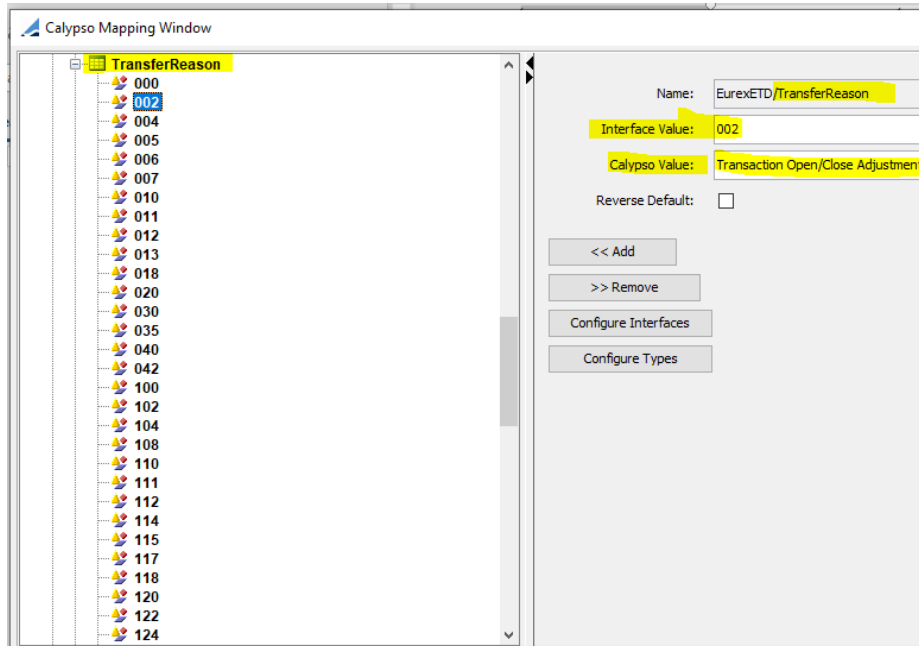
Interface Value	Calypso Value
0	Not approved (pending)
1	Approved
2	Rejected

Trade-Type

Interface Value	Calypso Value
0	Regular Trade
1	OTC Block Trade
1000	Vola Trade
1001	EFP-Fin Trade
1002	EFP-Index-Futures Trade
1004	Transaction based Settlement
1006	Enlight Triggered Trade
1007	Block QTPIP Trade
12	Exchange for Swap (EFS)
51	Volume Weighted Average Price
54	OTC

55	Exchange Basis Facility
63	Technical Trade

Transfer Reason

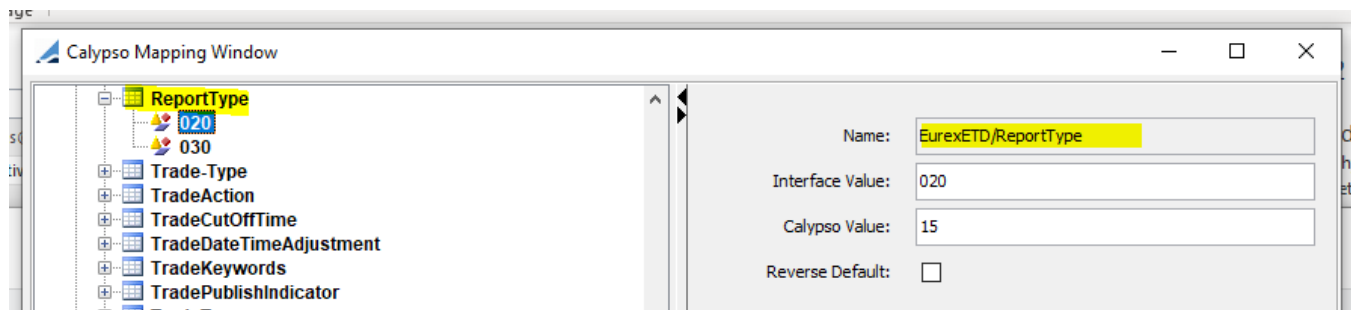


Interface Value Calypso Value

000	Execution
002	Transaction Open/Close Adjustment
004	Transaction Account Transfer
005	Transaction Adjustment
006	Split
007	Trade Reversal
010	Transaction with Closing Error
011	Average Pricing
012	De-Merge
013	Final Price Adjustment
018	Transaction based Settlement
020	Give-up
030	Give-In
035	Take-Up with Closing Error
040	Off-Book Trade
042	Off-Book Trade with Closing Error

100	Position Closing Adjustment
102	Position Transfer Internal
104	Position Transfer External by Clearing House
108	Position Opening Adjustment
110	Manual Exercise
111	Automatic Exercise
112	Exercise Adjustment
114	Assignment
115	Clearing House Transfer
117	Position Conversion
118	Position Adjustment Due to Capital Adjustment
120	Notification
122	Notification Adjustment
124	Allocation
126	Futures Position Creation
127	Abandon
129	Automatic Close-out
131	Technical Transaction
132	Decomposition
133	Price Correction Due To Corporate Action
306	Position Transfer External
307	Position Transfer External with Cash Amount

Report Type

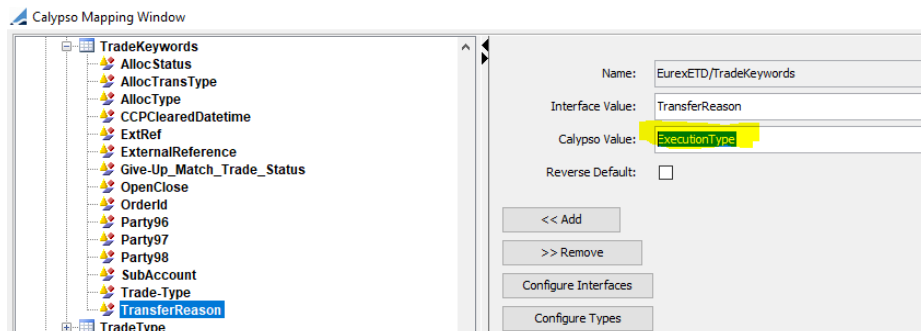


Interface Value Calypso Value

020	15
030	16

4.17 TradeKeywords

This allows storing certain fields from fixml file to Calypso trade keyword with same value as fixml or abbreviated value.



Interface Value

AllocStatus
AllocTransType
AllocType
CCPClearedDatetime
CCPRptRefID
ExternalReference
Give-Up_Match_Trade_Status
OpenClose
OrderId
Party96
Party97
Party98
ReportType
SubAccount
Trade-Type
TradePublishIndicator
TransferReason

Calypso Value

AllocStatus
AllocTransType
AllocType
CCPClearedDatetime
CCPRptRefID
CCPRptID
Matchtime
OpenClose
OrderId
Party96
Party97
Party98
ReportType
SubAccount
TradeType
TradePublishIndicator
ExecutionType

Notes:

- Currently Trade keywords are stored only for new/amend trades and not on lifecycle event (Exercise/Assignment) trades.
- User can define own Calypso Value as what trade attribute name to be created to store the value.
- TradeSource** – The default name is used to store in TradeSource is Interface name “EurexETD” and one can also change the default name to new value by inputting new value on TradeSource in calypso value field.

4.18 Timezone

Import timezone from FCM files using the following mapping:

Name = EurexETD/InputTimezone

Interface Value = +00:00

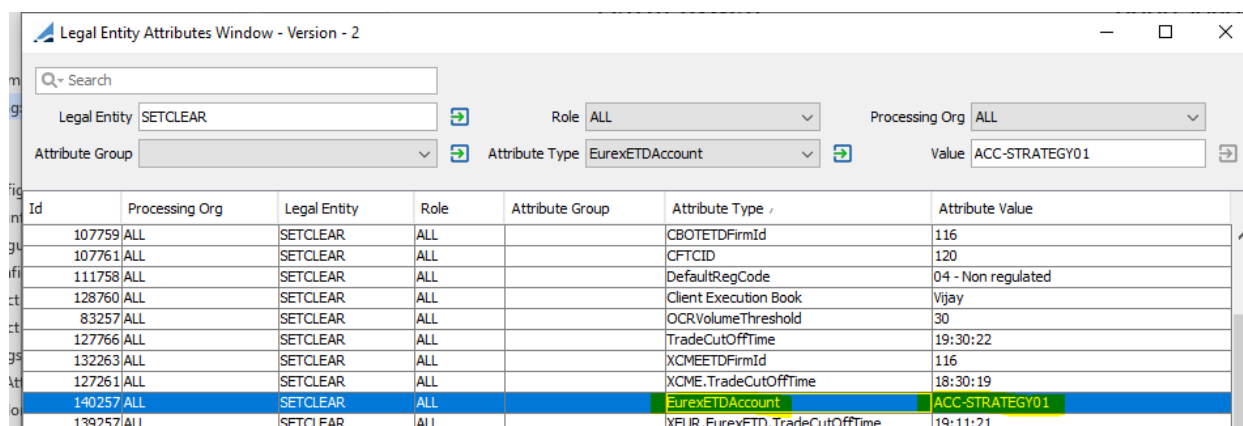
Calypso Value = Europe/London

If not set, the contract timezone is used.

4.19 Translator

Name = ETDEurex/Translator

In translator, user can define the date format of all value and specific one date field value, PO account attribute and external reference id prefix.



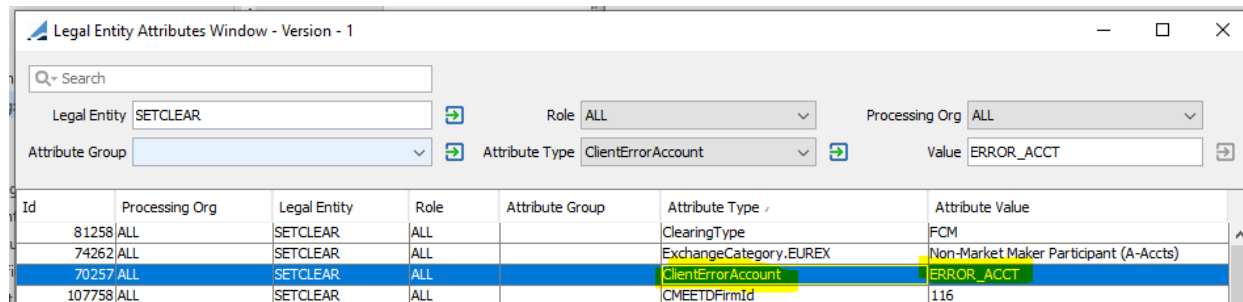
Legal Entity Attributes Window - Version 2

Search: []

Legal Entity: SETCLEAR Role: ALL Processing Org: ALL

Attribute Group: [] Attribute Type: EurexETDAccount Value: ACC-STRATEGY01

Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
107759	ALL	SETCLEAR	ALL		CBOTETDFirmId	116
107761	ALL	SETCLEAR	ALL		CFTCID	120
111758	ALL	SETCLEAR	ALL		DefaultRegCode	04 - Non regulated
128760	ALL	SETCLEAR	ALL		Client Execution Book	Vijay
83257	ALL	SETCLEAR	ALL		OCRVolumeThreshold	30
127766	ALL	SETCLEAR	ALL		TradeCutOffTime	19:30:22
132263	ALL	SETCLEAR	ALL		XCMEETDFirmId	116
127261	ALL	SETCLEAR	ALL		XCME.TradeCutOffTime	18:30:19
140257	ALL	SETCLEAR	ALL		EurexETDAccount	ACC-STRATEGY01
139257	ALL	SETCLEAR	ALL		XEUR.EurexETD.TradeCutOffTime	19:11:21



Legal Entity Attributes Window - Version 1

Search: []

Legal Entity: SETCLEAR Role: ALL Processing Org: ALL

Attribute Group: [] Attribute Type: ClientErrorAccount Value: ERROR_ACCT

Id	Processing Org	Legal Entity	Role	Attribute Group	Attribute Type	Attribute Value
81258	ALL	SETCLEAR	ALL		ClearingType	FCM
74262	ALL	SETCLEAR	ALL		ExchangeCategory.EUREX	Non-Market Maker Participant (A-Accts)
70257	ALL	SETCLEAR	ALL		ClientErrorAccount	ERROR_ACCT
107758	ALL	SETCLEAR	ALL		CMEETDFirmId	116

Interface Value

ClientAccountPOAttribute

ParentTradeLookupField

AllocTypeWithFallback

Calypso Value

EurexETDAccount (user can prepare user defined PO attribute name, if specific PO attribute is not defined then trade will go to Clienterroraccount defined in PO attribute.)

AllocType (in Eurex to amend the trade it is also required to lookup external reference with combination allocType to determine the correct trade to amend.

15 (for allocation report with rptTyp 15 it will look-up the trade with Externalreference & RptTyp of allocation report)

AllocTypeWithoutFallback	16 (for allocation report with rptTyp 16 it will look-up the trade with Extref & RptTyp of parent trade)
DateFormat	yyyy-MM-dd
ExternalReferencePrefix	EUREX (<i>user can change the prefix of external reference id but change before implementing the EurexETD otherwise cancelation/amendment will fail.</i>)
ContractPromptMonth_Date	yyyyMMdd
PromptMonth_Date	yyyyMM
TS_Trade_Datetime	yyyy-MM-dd'T'hh:mm:ss.SSS
TS1_Trade_Datetime	yyyy-MM-dd'T'hh:mm:ss.SSS
Trade_Datetime	yyyy-MM-dd'T'hh:mm:ss.SSS

Following are the supported date formats.

MMddyyyy
 MMyyyydd
 ddMMyyyy
 ddyyyyMM
 yyyyMMdd
 yyyyddMM
 MMMddyyyy
 MMMyyyydd
 ddMMMyyyy
 ddyyyyMMM
 yyyyMMMdd
 yyyyddMMM

Notes

- MM & MMM - month should be in uppercase
- dd & yyyy – day and year should be in lowercase
- you can separate with “-”, “/” in between the dd yyyy mm.

If a particular field in fixml has a format different from the common date format, then configure that specific date format.

4.20 Book

The book is selected based on the configuration of the clearing account setup under Account attribute “Clearing Book”. This is the default behavior. 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, Origin Code and Account Type of the Client Account and following the logic below:

Legal Entity Attributes Window - Version - 1

Legal Entity: BANK ALPHA Role: ALL

Processing Org: ALL

Attribute Type: Client Execution Book Value: BA ClientExecutionBook

Id	Processing Org	Legal Entity	Role	Attribute Type	Attribute Value
55260	ALL	BANK ALPHA	ALL	CTCTD	BANKALPHA_CTCTD
56801	ALL	BANK ALPHA	ALL	Client Execution Book	BA ClientExecutionBook
56803	ALL	BANK ALPHA	ALL	House Execution Book	BA HouseExecutionBook
56800	ALL	BANK ALPHA	ALL	Client Clearing Book	BA ClientClearingBook
56802	ALL	BANK ALPHA	ALL	House Clearing Book	BA HouseClearingBook
56804	ALL	BANK ALPHA	ALL	Client Clearing Book	BA ClientClearingBook
60200	ALL	BANK ALPHA	ALL	EurexFirmid	CALXV

Client Execution Book – Client account definition subtype (Execution), Account attribute “AccountType” (Client)

House Execution Book – Client account definition subtype (Execution), Account attribute “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 Eurex fixml file Client account will not always be mentioned for amendment, so by default domain “SkipBookValidationForAmend” is configured to skip the trading book validation for that entire Interface Name if no client account i.e. txt2 is not present in fixml file.

Domain SkipBookValidationForAmend

Domain Values

Reload Save Save All Constraints Setup

Search: SkipBookValidationForAmend 2 of 2 Value

Tree View:

- SkipBookValidationForAmend
- EurexETD
- SkipTradeExistenceCheck
- SkipWorkflowCheck
- sortMethod

Details:

Name: SkipBookValidationForAmend

Value: EurexETD

Comment:

4.21 Counterparty

Domain SkipCounterPartyValidationForAmend

If the source is configured in this domain, then counterparty will not be validated during AMEND operation for that source.

Domain Values

Reload Save Save All Constraints Setup

Search: SkipCounterPartyValidationForAmend 1 of 1 Value

Tree View:

- SkipCounterPartyValidationForAmend
- EurexETD
- SkipTradeExistenceCheck
- SkipWorkflowCheck
- sortMethod
- SourceBOMessageIncompleteStates
- SPB.Templates
- SPBCancellation

Details:

Name: SkipCounterPartyValidationForAmend

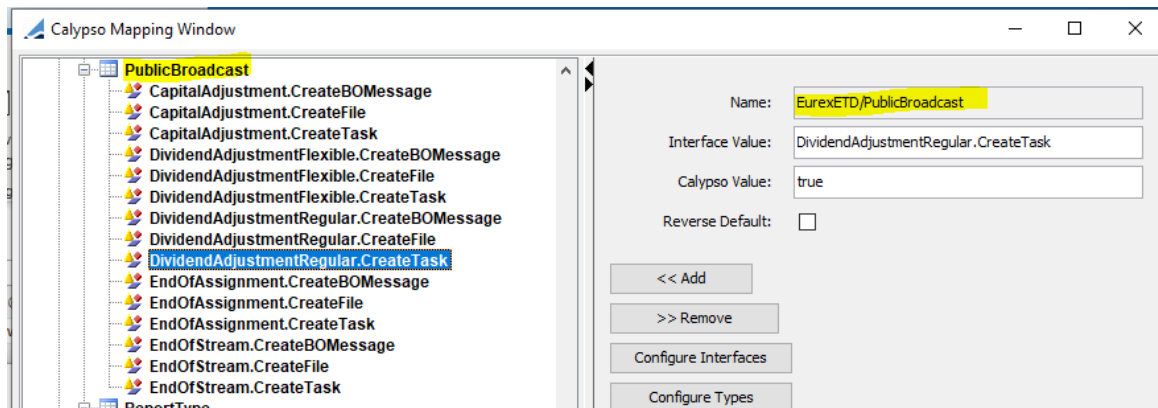
Value: EurexETD

Comment:

<< Add Add & Save >> Remove

4.22 Public Broadcast

Eurex public broadcast queue sends Eurex ETD related news and information in this queue. Calypso supports these message as ignore object and record the message details in BO Message report, task station and store fixml file in local path.



The supported messages are CapitalAdjustment, DividendAdjustment, EndofAssignment and EndOfstream.

The above calypso mappings enable whether to create task, file, and BO message.

True = to create task, file, and BO Message and false = not to generate task, file, and BO messages.

The default calypso value is true.

Interface value	Calypso value
CapitalAdjustment.CreateBOMessage	true
CapitalAdjustment.CreateFile	true
CapitalAdjustment.CreateTask	true
DividendAdjustmentFlexible.CreateBOMessage	true
DividendAdjustmentFlexible.CreateFile	true
DividendAdjustmentFlexible.CreateTask	true
DividendAdjustmentRegular.CreateBOMessage	true
DividendAdjustmentRegular.CreateFile	true
DividendAdjustmentRegular.CreateTask	true
EndOfAssignment.CreateBOMessage	true
EndOfAssignment.CreateFile	true
EndOfAssignment.CreateTask	true
EndOfStream.CreateBOMessage	true
EndOfStream.CreateFile	true
EndOfStream.CreateTask	true

4.23 Pricing Environment

When an exercise/assignment message is received through the FCM trade interface, it looks for the User Defaults pricing environment by default to process closeout trades.

To use the same environments for all users, you can set the following mapping:

Name:	EurexETD/Translator
Interface Value:	PricingEnvironment
Calypso Value:	ETD Pricing Evrnmnt

Name = EurexETD/Translator

Interface Value = PricingEnvironment

Calypso Value = <pricing env name>

4.24 Message Attributes

You can define mapping for message attributes.

Name = EuexETD/MessageAttributes

Interface Value - <Eurex message attribute>

Calypso Value = <Calypso message attribute>

Sequence to Start Environment for Eurex Connectivity

AuthServer.bat
EventServer.bat
DataServer.bat
EngineServer.bat
calypsoMessagingServer.bat
dataPersistor.bat
feedTranslator.bat
EUREXETDCONFIRMATIONIncomingFeed.bat
EUREXETDCONFIRMATIONNCMIncomingFeed.bat
EUREXETDWORKFLOWIncomingFeed.bat
EUREXETDWORKFLOWNCMIncomingFeed.bat
EUREXETDPUBLICIncomingFeed.bat
EUREXETDTRADEUPLOADERIncomingFeed.bat
EurexETDInjectMessage.bat (whenever required to consume trade file from specific folder or file)

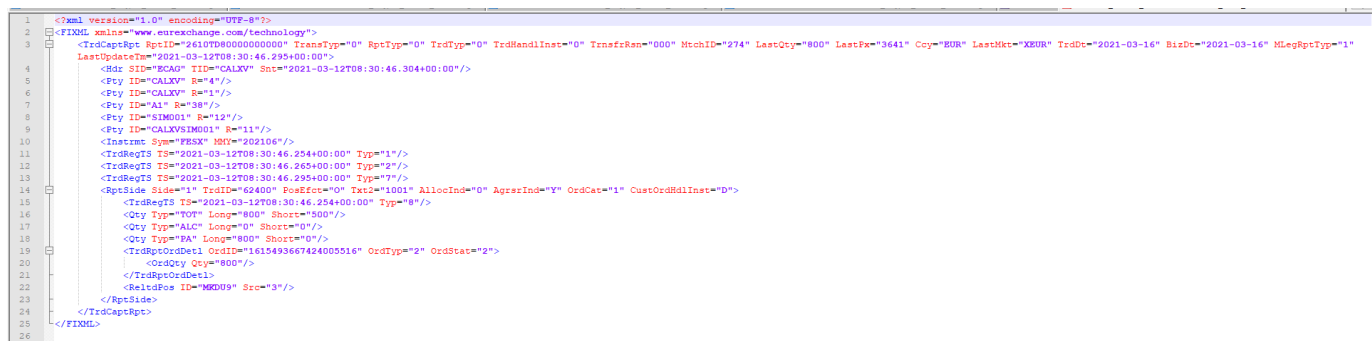
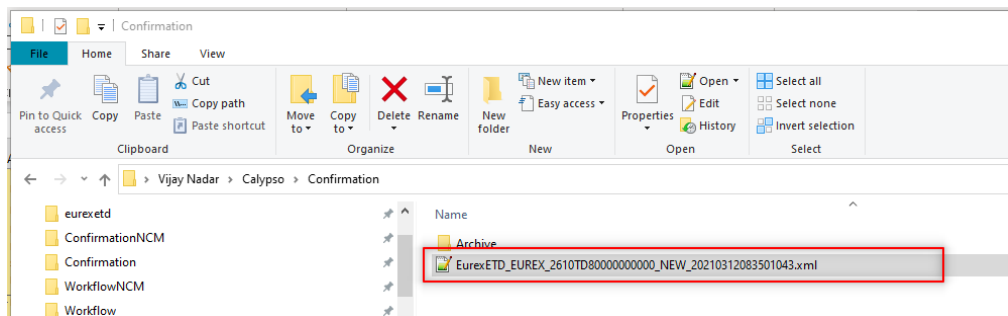
Sample Process

6.1 New Future

Trade entered in T7.

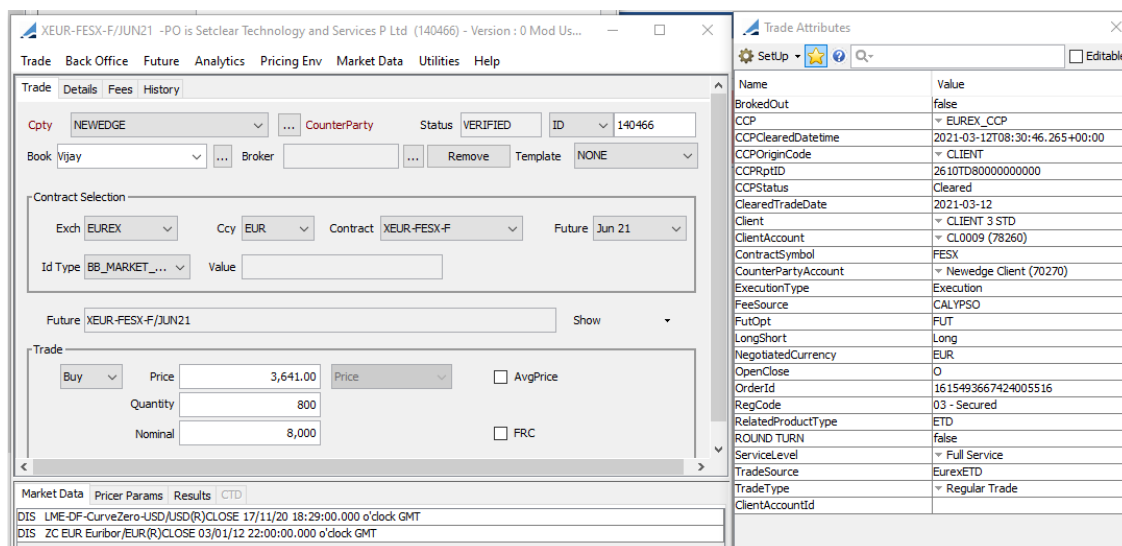
Once the trade is executed successfully, trade can be seen in C7 under Transaction Management > Transaction Overview.

Simultaneously through the Interface Connectivity Trade confirmation queue, the below fixml message will be received in Incoming feed log as well as it will be get stored in specified path.



Message received in BO Message report.

Message Report (12/03/21 07:14:00) / ETD																		
Report Data View Export Market Data Process Utilities Help																		
Criteria																		
Advice Config Id	MESSAGE_ID	Msg_Attr.UploadObjectExternalRef	Trade Id	Msg Status	DOCUMENT_EDITED	TRADE_UPDATE_DATETIME	EVENT_TYPE	Family	Product Type	MESSAGE_TYPE	Sender	Sender Role	Sender Contact Type	Sender Address Code	Receiver	Receiver Role	Receiver Contact Type	Receiver Address Code
68723	124106		140444TO_BE_SENT			12/03/21 07:20:04.790 o'clock GMT	VERIFIED_TRADE	Future	FutureEquityIndex	Confirmation	SETCLEAR	ProcessingOrg	Operation	Set.clear@CLS.com	CLIENT 3 STD	Client	Default	
68723	124107		140465TO_BE_SENT			12/03/21 07:21:31.152 o'clock GMT	VERIFIED_TRADE	Future	FutureEquityIndex	Confirmation	SETCLEAR	ProcessingOrg	Operation	Set.clear@CLS.com	CLIENT 3 STD	Client	Default	
0	124108	1406442	140465PENDING				EX_UPLOADSOURCMSG			UPLOADSOURCMSG	CLIENT				CALYPSO			
0	124109	1406442	140465COMPLETED				EX_UPLOADSOURCMSG			UPLOADSOURCMSG	CLIENT				CALYPSO			
0	124110	1406442	140465COMPLETED				EX_INCOMINGFEESMSG			INCOMINGFEESMSG	NEWEDGE				SETCLEAR			
68723	124111		140466TO_BE_SENT			12/03/21 08:35:03.130 o'clock GMT	VERIFIED_TRADE	Future	FutureEquityIndex	Confirmation	SETCLEAR	ProcessingOrg	Operation	Set.clear@CLS.com	CLIENT 3 STD	Client	Default	



The screenshot displays the 'XEUR-FESX-F/JUN21' trade window. The 'Trade' tab is active, showing details for a trade entered by 'NEWEDGE' with counterparty 'VERIFIED' and ID '140466'. The trade is for 'EUR' on 'Jun 21' with a price of '3,641.00' and a quantity of '800'. The 'Trade Attributes' window on the right shows details for the trade, including 'Name', 'Value', 'Status', 'Client', 'Contract', 'Execution', and 'TradeType'.

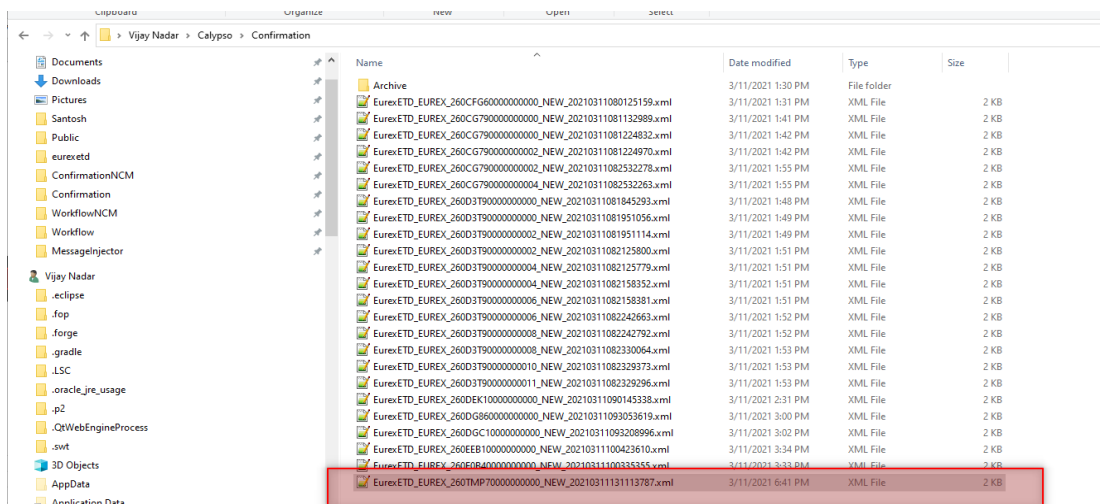
6.2 New Option

Order entered in T7 for CP Account A1 and Client account 1001

Order successfully executed.

Trade got captured in C7.

fixml message received on the below path.

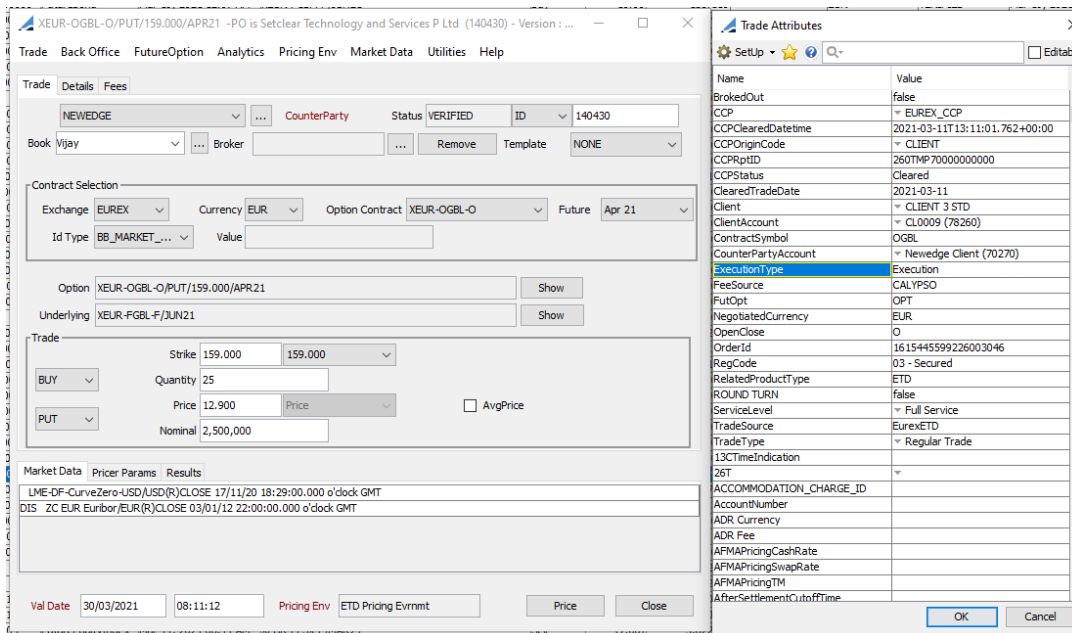


The screenshot shows a file explorer window with the path 'Vijay Nadar > Calypso > Confirmation'. The table below lists the files in this directory, including their names, dates, times, and sizes.

Name	Date modified	Type	Size
Archive	3/11/2021 1:30 PM	File folder	
EurexETD_EUREX_260CF60000000000_NEW_20210311080125159.xml	3/11/2021 1:31 PM	XML File	2 KB
EurexETD_EUREX_260CG790000000000_NEW_20210311081132989.xml	3/11/2021 1:41 PM	XML File	2 KB
EurexETD_EUREX_260CG790000000000_NEW_20210311081224832.xml	3/11/2021 1:42 PM	XML File	2 KB
EurexETD_EUREX_260CG790000000000_NEW_20210311081224970.xml	3/11/2021 1:42 PM	XML File	2 KB
EurexETD_EUREX_260CG790000000000_NEW_20210311082532278.xml	3/11/2021 1:55 PM	XML File	2 KB
EurexETD_EUREX_260CG790000000000_NEW_20210311082532263.xml	3/11/2021 1:55 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311081845293.xml	3/11/2021 1:48 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311081951056.xml	3/11/2021 1:49 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311081951114.xml	3/11/2021 1:49 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082125800.xml	3/11/2021 1:51 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082125779.xml	3/11/2021 1:51 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082158352.xml	3/11/2021 1:51 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082158381.xml	3/11/2021 1:51 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082342663.xml	3/11/2021 1:52 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082342792.xml	3/11/2021 1:52 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082330064.xml	3/11/2021 1:53 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082329373.xml	3/11/2021 1:53 PM	XML File	2 KB
EurexETD_EUREX_260D37900000000000_NEW_20210311082329296.xml	3/11/2021 1:53 PM	XML File	2 KB
EurexETD_EUREX_260DEK100000000000_NEW_20210311090145338.xml	3/11/2021 2:31 PM	XML File	2 KB
EurexETD_EUREX_260DG860000000000_NEW_20210311093053619.xml	3/11/2021 3:00 PM	XML File	2 KB
EurexETD_EUREX_260DGC100000000000_NEW_20210311093208996.xml	3/11/2021 3:02 PM	XML File	2 KB
EurexETD_EUREX_260EEB100000000000_NEW_20210311100423610.xml	3/11/2021 3:34 PM	XML File	2 KB
EurexETD_EUREX_260F08400000000000_NEW_20210311100335355.xml	3/11/2021 3:33 PM	XML File	2 KB
EurexETD_EUREX_260TMP700000000000_NEW_20210311131113787.xml	3/11/2021 6:41 PM	XML File	2 KB

```
<?xml version="1.0" encoding="UTF-8"?>
<FIXML xmlns="www.eurexchange.com/technology">
  <TradeCapt RptID="260TMP7000000000" TransType="0" RptType="0" TrdType="0" TrdHandlInst="0" TrnsfrRsn="000" MchID="8" LastQty="25" LastPx="12.9" Ccy="EUR" LastMkt="XEUR" TrdDt="2021-03-11" BizDt="2021-03-11" MLegRptType="1"
    LastUpdateTm="2021-03-11T13:11:01.804+00:00">
    <Hdr SID="BCAG" TID="CALXV" Snt="2021-03-11T13:11:01.811+00:00"/>
    <Pty ID="CALXV" R="4"/>
    <Pty ID="CALXV" R="1"/>
    <Pty ID="A1" R="38"/>
    <Pty ID="SIM001" R="12"/>
    <Pty ID="CALXVSIM001" R="11"/>
    <Instrmt Sym="OGBL" Mch="202104" StrkPx="159" OptAc="0" PutCall="1"/>
    <Amt Typ="PRM" Amt="0"/>
    <TrdRegTS TS="2021-03-11T13:11:01.753+00:00" Type="1"/>
    <TrdRegTS TS="2021-03-11T13:11:01.762+00:00" Type="2"/>
    <TrdRegTS TS="2021-03-11T13:11:01.804+00:00" Type="7"/>
    <RptSide Side="1" TrdID="31877684" PosEfct="0" Txt2="1001" AllocInd="0" AgrsInd="Y" OrdCat="1" CustOrdHdlInst="D">
    <TrdRegTS TS="2021-03-11T13:11:01.753+00:00" Type="8"/>
    <Qty Type="TOT" Long="25" Short="0"/>
    <Qty Type="ALC" Long="0" Short="0"/>
    <Qty Type="PA" Long="25" Short="0"/>
    <TrdRptOrdDet1 OrdID="1615445599226003046" OrdType="2" OrdStat="2">
    <OrdQty Qty="25"/>
    </TrdRptOrdDet1>
    <ReltdPos ID="MOTL7" Stc="3"/>
  </RptSide>
</TradeCapt>
</FIXML>
```

Trade received in Trade browser.



The screenshot shows the 'Trade' tab selected in the 'Trade browser' window. The trade details for 'XEUR-OGBL-O/PUT/159.000/APR21' are displayed. The 'Trade Attributes' pane on the right shows various fields such as 'Name', 'Value', 'BrokeredOut', 'CCP', 'CCPclearedDate', 'CCPoriginCode', 'CCPPrtdID', 'CCPstatus', 'ClearedTradeDate', 'Client', 'ClientAccount', 'ContractSymbol', 'CounterPartyAccount', 'ExecutionType', 'FeeSource', 'FutOpt', 'NegotiatedCurrency', 'OpenClose', 'OrderID', 'RegCode', 'RelatedProductType', 'ROUND TURN', 'ServiceLevel', 'TradeSource', 'TradeType', '13CTimeIndication', '26T', 'ACCOMMODATION_CHARGE_ID', 'AccountNumber', 'ADR Currency', 'ADR Fee', 'AFMAPricingCashRate', 'AFMAPricingSwapRate', 'AFMAPricingTM', and 'AfterSettlementCutoffTime'.

6.3 Give-up

New Trade Executed from T7.

Fixml received in Trade confirmation queue once the trade executed from T7.

```
<?xml version="1.0" encoding="UTF-8"?>
<FIXML xmlns="www.eurexchange.com/technology">
  <TradeCapt RptID="260TMP7000000000" TransType="0" RptType="0" TrdType="0" TrdHandlInst="0" TrnsfrRsn="000" MchID="178" LastQty="200" LastPx="90.05" Ccy="EUR" LastMkt="XEUR" TrdDt="2021-03-11" BizDt="2021-03-11" MLegRptType="1"
    LastUpdateTm="2021-03-11T14:25:31.475+00:00">
    <Hdr SID="BCAG" TID="CALXV" Snt="2021-03-11T14:25:31.482+00:00"/>
    <Pty ID="CALXV" R="4"/>
    <Pty ID="CALXV" R="1"/>
    <Pty ID="A1" R="38"/>
    <Pty ID="SIM001" R="12"/>
    <Pty ID="CALXVSIM001" R="11"/>
    <Instrmt Sym="OGBL" Mch="202104" StrkPx="159" OptAc="0" PutCall="1"/>
    <Amt Typ="PRM" Amt="0"/>
    <TrdRegTS TS="2021-03-11T14:25:31.441+00:00" Type="1"/>
    <TrdRegTS TS="2021-03-11T14:25:31.453+00:00" Type="2"/>
    <TrdRegTS TS="2021-03-11T14:25:31.475+00:00" Type="7"/>
    <RptSide Side="1" TrdID="48700" PosEfct="0" Txt2="1001" AllocInd="0" AgrsInd="Y" OrdCat="1" CustOrdHdlInst="D">
    <TrdRegTS TS="2021-03-11T14:25:31.441+00:00" Type="8"/>
    <Qty Type="TOT" Long="2375" Short="2086"/>
    <Qty Type="ALC" Long="659" Short="0"/>
    <Qty Type="PA" Long="200" Short="0"/>
    <TrdRptOrdDet1 OrdID="1615431578253000174" OrdType="2" OrdStat="1">
    <OrdQty Qty="223"/>
    </TrdRptOrdDet1>
    <ReltdPos ID="IMAB1" Stc="3"/>
  </RptSide>
</TradeCapt>
</FIXML>
```

Trade given up from C7.

Once the above details are submitted, the below two messages get generated.

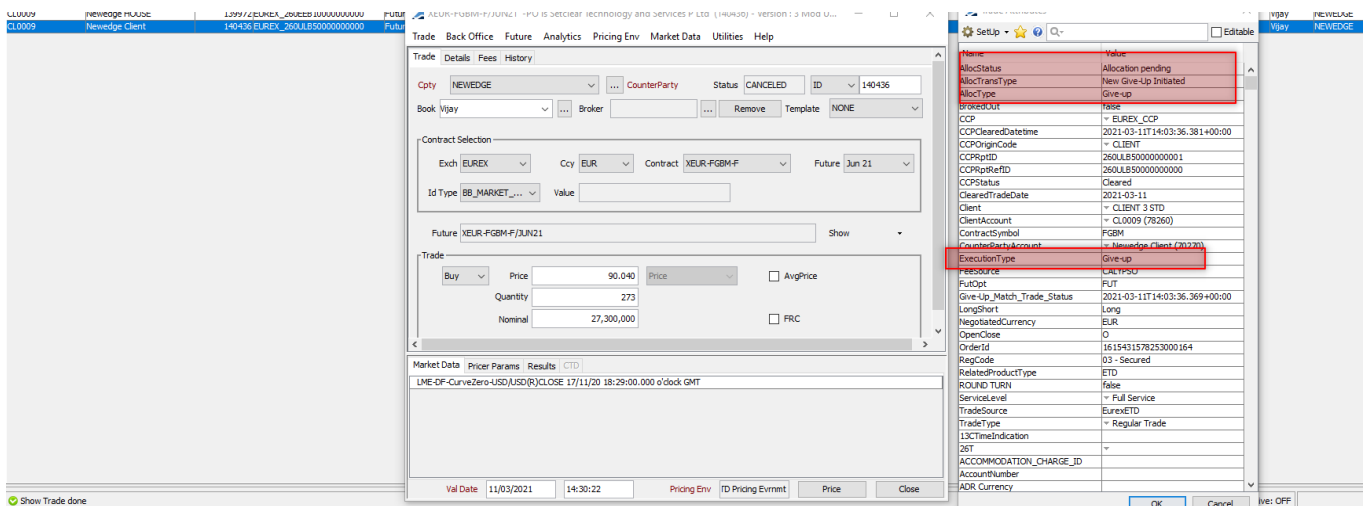
Workflow queue.

```

17 <?xml version="1.0" encoding="UTF-8"?>
18 <FIXML xmlns="www.eurexchange.com/technology">
19   <AllocRpt RptID="CTS011" TransTyp="0" ID="2466709" RptTyp="15" Stat="6" BizDt="2021-03-11" TrdTyp="0" Side="1" Qty="200" LastMkt="XEUR" AvgPx="90.05" Coy="EUR" TrdDt="2021-03-11" CustOrdRdInst="D">
20     <Hdr SID="BCAG" TID="CALXV" Snt="2021-03-11T14:28:12.033+00:00"/>
21     <AllocRpt TrdID="260UMT100000000000" MchTS="2021-03-11T14:25:31.441+00:00"/>
22     <Instmnt Sys="FGBM" ISIT="202106"/>
23     <Alloc Qty="200" AllocPosEfc="0" Txt2="BA">
24       <Pty ID="CALXV" R="95"/>
25       <Pty ID="CAEXV" R="96"/>
26       <Sub ID="0" Typ="4001"/>
27     </Pty>
28     <Pty ID="CALXV" R="97"/>
29     <Sub ID="1" Typ="4001"/>
30     </Pty>
31     <Pty ID="A1" R="38"/>
32     </Alloc>
33   </AllocRpt>
34 </FIXML>
35
36 <?xml version="1.0" encoding="UTF-8"?>
37 <FIXML xmlns="www.eurexchange.com/technology">
38   <AllocRpt RptID="CTS024" TransTyp="0" ID="2466709" RptTyp="15" Stat="6" BizDt="2021-03-11" TrdTyp="0" Side="1" Qty="200" LastMkt="XEUR" AvgPx="90.05" Coy="EUR" TrdDt="2021-03-11" CustOrdRdInst="D">
39     <Hdr SID="BCAG" TID="CALXV" Snt="2021-03-11T14:28:12.033+00:00"/>
40     <AllocRpt TrdID="260UMT100000000000" MchTS="2021-03-11T14:25:31.441+00:00"/>
41     <Instmnt Sys="FGBM" ISIT="202106"/>
42     <Alloc Qty="200" AllocPosEfc="0" Txt2="BA">
43       <Pty ID="CALXV" R="95"/>
44       <Pty ID="CAEXV" R="96"/>
45       <Sub ID="0" Typ="4001"/>
46     </Pty>
47     <Pty ID="CALXV" R="97"/>
48     <Sub ID="1" Typ="4001"/>
49     </Pty>
50     <Pty ID="A1" R="38"/>
51     </Alloc>
52   </AllocRpt>
53 </FIXML>

```

Allocation report fixml message is to amend and add the trade with all the calypso mapping keywords on the below trade.



The screenshot displays the Calypso software interface. On the left, a trade entry form is visible with fields for 'Cpty' (NEWEDGE), 'Broker' (Vijay), 'Contract' (XEUR-FGBM-F), and 'Future' (Jun 21). The 'Trade' tab is active, showing a 'Buy' order with a price of 90.040 and a quantity of 273. The 'Market Data' tab shows the LME OF-CurveZero-USD(USD(R)CLOSE 17/11/20 18:29:00.000 o'clock GMT. On the right, a detailed trade information panel is open, showing various fields such as 'AllocStatus' (Allocation pending), 'AllocTransType' (New Give-Up Initiated), 'AllocType' (Give-up), 'BrokerID' (rise), 'CCP' (EUREX CCP), 'CCPclearedDate' (2021-03-11T14:03:36.381+00:00), 'CCPorigCode' (CLIENT), 'CCPRefID' (260ULB500000000001), 'CCPRefID' (260ULB500000000000), 'Cleared' (2021-03-11), 'Client' (CLIENT 3 STD), 'ClientAccount' (CL0009 (78260)), 'ContractSymbol' (FGBM), 'CounterPartyAccount' (Newedge Client (20230)), 'ExecutionType' (Give-up), 'Resource' (CALYPSO), 'FutOpt' (FUT), 'GiveUp_Match_Trade_Status' (2021-03-11T14:03:36.369+00:00), 'LongShort' (Long), 'NegotiatedCurrency' (EUR), 'OpenClose' (O), 'OrderID' (1615431578253000164), 'RegCode' (03 - Secured), 'RelatedProductType' (ETD), 'ROUND TURN' (false), 'ServiceLevel' (Full Service), 'TradeSource' (EurexETD), 'TradeType' (Regular Trade), '13CTimeIndication' (26T), 'ACCOMMODATION_CHARGE_ID', 'AccountNumber', and 'ADR Currency'.

6.4 Open/Close Adjustment

Trade was entered with O from T7 and same captured in C7.

fixml received with O and trade captured in calypso as O.

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="http://www.eurexchange.com/technology/">
3   <TrdCapRpt RptID="261102800000000000" TransType="0" RptType="0" TrdType="0" TrdHandlInst="0" TrnsfrRsn="000" HtchID="306" LastQty="1" LastPx="3702" Coy="EUR" LastMkt="XEUR" TrdDt="2021-03-16" BizDt="2021-03-16" MLegRptType="1"
4     LastUpdateTm="2021-03-12T09:10:23.906+00:00">
5     <Hdr SID="EAG" IID="CALXV" Snt="2021-03-12T09:10:23.913+00:00"/>
6     <Pty ID="CALXV" R="4"/>
7     <Pty ID="CALXV" R="1"/>
8     <Pty ID="A1" R="38"/>
9     <Pty ID="SIM001" R="12"/>
10    <Pty ID="CALXVSIM001" R="11"/>
11    <Instmnt Sym="FESX" Mkt="202103"/>
12    <TrdRegTS TS="2021-03-12T09:10:23.873+00:00" Typ="1"/>
13    <TrdRegTS TS="2021-03-12T09:10:23.883+00:00" Typ="2"/>
14    <TrdRegTS TS="2021-03-12T09:10:23.883+00:00" Typ="2"/>
15    <RptSide Side="1" TrdID="70400" PosFct="0" Trkt="1001" AllocInd="0" AgrsrInd="Y" OrdCat="1" CustOrdHdlnst="D">
16      <TrdRegTS TS="2021-03-12T09:10:23.873+00:00" Typ="8"/>
17      <Qty Typ="TOT" Long="1875" Short="885"/>
18      <Qty Typ="ALC" Long="51" Short="7"/>
19      <Qty Typ="PA" Long="1" Short="0"/>
20      <TrdRptOrdDetl OrdID="1615493667424004599" OrdType="2" OrdStat="2">
21        <OrdQty Qty="1"/>
22      </TrdRptOrdDetl>
23      <ReltdPos ID="MGDPV" Scc="3"/>
24    </RptSide>
25  </TrdCapRpt>
26 </FIXML>

```

XEUR-FESX-F/MAR21 - PO is Setclear Technology and Services P Ltd (140528) - Version: 1 Mod Us...

Trade Back Office Future Analytics Pricing Env Market Data Utilities Help

Trade Details Fees History

Cpty NEWEDGE CounterParty State

Book Vijay Broker

Contract Selection

Exch EUREX Ccy EUR Contract XEUR-FESX

Id Type BB_MARKET... Value

Future XEUR-FESX-F/MAR21

Trade

Buy Price 3,702.00 Price

Quantity 1

Nominal 10

Market Data Price Params Results CTD

DIS LME-OF-CurveZero-USD/USD(R)CLOSE 17/11/20 18:29:00.000 o'clock GMT

DIS ZC EUR Euribor/EUR(R)CLOSE 03/01/12 22:00:00.000 o'clock GMT

Val Date 12/03/2021 09:13:03 Pricing Env TD

Trade Attributes

Setup Editable

Name	Value
BrokeredOut	false
CCP	EUREX_CCP
CCPClearedDate	2021-03-12T09:10:23.883+00:00
CCPOriginCode	CLIENT
CCPRptID	2611028000000000001
CCPRptRefID	2611028000000000000
CCPStatus	Cleared
ClearedTradeDate	2021-03-12
Client	CLIENT 3 STD
ClientAccount	CL0009 (78260)
ContractSymbol	FESX
CounterPartyAccount	Newedge Client (70270)
ExecutionType	Transaction Open/Close Adjustment
FeeSource	CALYPSO
FutOpt	FUT
LongShort	Long
NegotiatedCurrency	EUR
OpenClose	O
OrderID	1615493667424004599
RegCode	03 - Secured
RelatedProductType	ETD
ROUND TURN	false
ServiceLevel	Full Service
TradeSource	EurexETD
TradeType	Regular Trade
ClientAccountID	

OK Cancel

You can amend the OpenClose from O to C in C7 using O/C Adjust

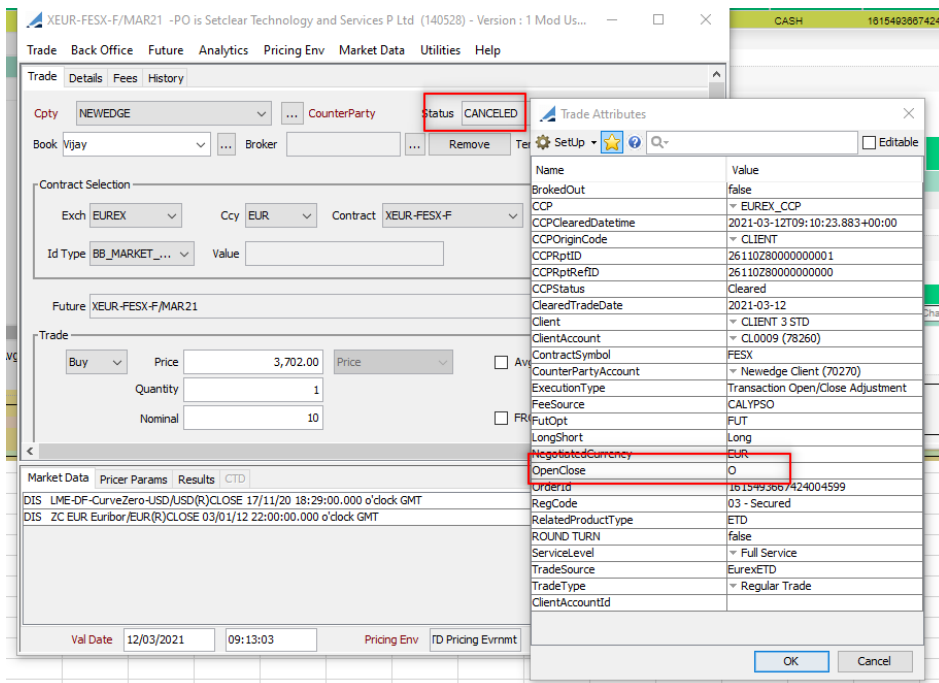
The above parent trade will be cancelled, and new trade will be created.

Fixml received to cancel the parent trade.

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="http://www.eurexchange.com/technology/">
3   <TrdCapRpt RptID="261102800000000000" TransType="0" RptType="0" TrdType="0" TrdHandlInst="0" TrnsfrRsn="002" RptRefID="261102800000000000" HtchID="306" LastQty="1" LastPx="3702" Coy="EUR" LastMkt="XEUR" TrdDt="2021-03-16" BizDt="2021-03-16" MLegRptType="1"
4     LastUpdateTm="2021-03-16" MLegRptType="1">
5     <Hdr SID="EAG" IID="CALXV" Snt="2021-03-12T09:11:18.002+00:00"/>
6     <Pty ID="CALXV" R="4"/>
7     <Pty ID="CALXV" R="1"/>
8     <Pty ID="A1" R="38"/>
9     <Pty ID="SIM001" R="12"/>
10    <Pty ID="CALXVSIM001" R="11"/>
11    <Instmnt Sym="FESX" Mkt="202103"/>
12    <TrdRegTS TS="2021-03-12T09:10:23.906+00:00" Typ="1"/>
13    <TrdRegTS TS="2021-03-12T09:10:23.873+00:00" Typ="1"/>
14    <TrdRegTS TS="2021-03-12T09:10:23.883+00:00" Typ="2"/>
15    <RptSide Side="1" TrdID="70400" PosFct="0" Trkt="1001" AllocInd="0" AgrsrInd="Y" OrdCat="1" CustOrdHdlnst="D">
16      <TrdRegTS TS="2021-03-12T09:10:23.873+00:00" Typ="8"/>
17      <Qty Typ="TOT" Long="1874" Short="885"/>
18      <Qty Typ="ALC" Long="51" Short="7"/>
19      <Qty Typ="PA" Long="1" Short="0"/>
20      <TrdRptOrdDetl OrdID="1615493667424004599" OrdType="2" OrdStat="2">
21        <OrdQty Qty="1"/>
22      </TrdRptOrdDetl>
23      <ReltdPos ID="MGDPV" Scc="3"/>
24    </RptSide>
25  </TrdCapRpt>
26 </FIXML>

```



Trade Attributes

Name	Value
BrokeredOut	false
CCP	EUREX CCP
CCPClearedDatetime	2021-03-12T09:10:23.883+00:00
CCPOriginCode	CLIENT
CCPRptID	261102800000000001
CCPRptRefID	261102800000000000
CCPStatus	Cleared
ClearedTradeDate	2021-03-12
Client	CLIENT 3 STD
ClientAccount	CL0009 (78260)
ContractSymbol	FESX
CounterPartyAccount	Newedge Client (70270)
ExecutionType	Transaction Open/Close Adjustment
FeeSource	CALYPSO
FutOpt	FUT
LongShort	Long
NegotiatedCurrency	EUR
OpenClose	O
OrderID	1615493667424004599
RegCode	03 - Secured
RelatedProductType	ETD
ROUND TURN	false
ServiceLevel	Full Service
TradeSource	EurexETD
TradeType	Regular Trade
ClientAccountID	

Fixml received to create new trade with "C"

```
<?xml version="1.0" encoding="UTF-8"?>
<FIXML xmlns="www.eurexchange.com/techno...>
  <TrdCapRpt RptID="261102800000000000" TransType="0" RptType="0" TrdType="0" TrdHandlInst="0" TransRsn="002" RptRefID="261102800000000000" MchID="306" LastQty="1" LastPx="3702" Cpy="EUR" LastMkt="XEUR" TrdDt="2021-03-16" BizDt="2021-03-16" MlegRptType="1" LastUpdateTm="2021-03-12T09:11:17.954+00:00">
    <Hdr ID="BCAG" TID="CALXV" Snt="2021-03-12T09:11:18.015+00:00"/>
    <Pty ID="CALXV" R="4"/>
    <Pty ID="CALXV" R="1"/>
    <Pty ID="AI" R="38"/>
    <Pty ID="SIM001" R="12"/>
    <Pty ID="CALXVSI001" R="11"/>
    <Instmt Sym="FESX" Mkt="202103"/>
    <TrdRegTS TS="2021-03-12T09:10:23.873+00:00" Typ="1"/>
    <TrdRegTS TS="2021-03-12T09:10:23.883+00:00" Typ="2"/>
    <TrdRegTS TS="2021-03-12T09:10:23.893+00:00" Typ="7"/>
    <RptSide Side="1" TrdID="70400" PosSide="C" TrdID="1001" AllocInd="0" AggrInd="N" OrdCat="1" CustOrdRefID="D">
      <TrdRegTS TS="2021-03-12T09:10:23.873+00:00" Typ="8"/>
      <Qty Typ="TOT" Long="1874" Short="884"/>
      <Qty Typ="ALC" Long="51" Short="7"/>
      <Qty Typ="PA" Long="0" Short="1"/>
      <TrdRptOrdDet1 OrdID="1615493667424004599" OrdType="2" OrdStat="2">
        <OrdQty Qty="1"/>
      </TrdRptOrdDet1>
      <ReltdPos ID="MDVVF" Src="3"/>
    </RptSide>
  </TrdCapRpt>
</FIXML>
```


Archive	3/15/2021 2:12 PM	File folder	
EurexETD_EUREX_261E9C2000000000_NEW_20210315084645598.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261E9E0000000000_NEW_20210315084645615.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261DZC7000000000_NEW_20210315084646467.xml	3/15/2021 2:16 PM	XML File	1 KB
EurexETD_EUREX_261E9AF000000000_NEW_20210315084646432.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261E9EA000000000_NEW_20210315084646248.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261E9G0000000000_NEW_20210315084646143.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261E9K5000000000_NEW_20210315084646295.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261E9M0000000000_NEW_20210315084646271.xml	3/15/2021 2:16 PM	XML File	2 KB
EurexETD_EUREX_261E981000000000_NEW_20210315084646122.xml	3/15/2021 2:16 PM	XML File	2 KB

8 Cancellation messages processed in Calypso Trade browser.

Client Account	CounterParty Account	Trade Id	External Reference	Product Type	Trade Date	Product Description	Buy/Sell	Quantity	Trade Price	Trade Currency	TradeStatus	Entered Date	Entered User	Book	CounterParty	Trader	Settle Cur.
CL0009	Nevedge Client	141046	EUREX_261E9AF000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141045	EUREX_261E9AF000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141052	EUREX_261E9AF000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141048	EUREX_261E9AF000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141047	EUREX_261E9C2000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141049	EUREX_261E9G0000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	6.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141051	EUREX_261E9K5000000000	FutureBond	Mar 15, 2021 06:39 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:39 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR
CL0009	Nevedge Client	141044	EUREX_261E9E0000000000	FutureBond	Mar 15, 2021 06:38 AM	XLRL-FGBM-F/JUN21	Buy	1.00	135.010	EUR	CANCELED	Mar 15, 2021 08:38 AM	calypso_user	Vjaj	NEVEDGE	EUR	EUR

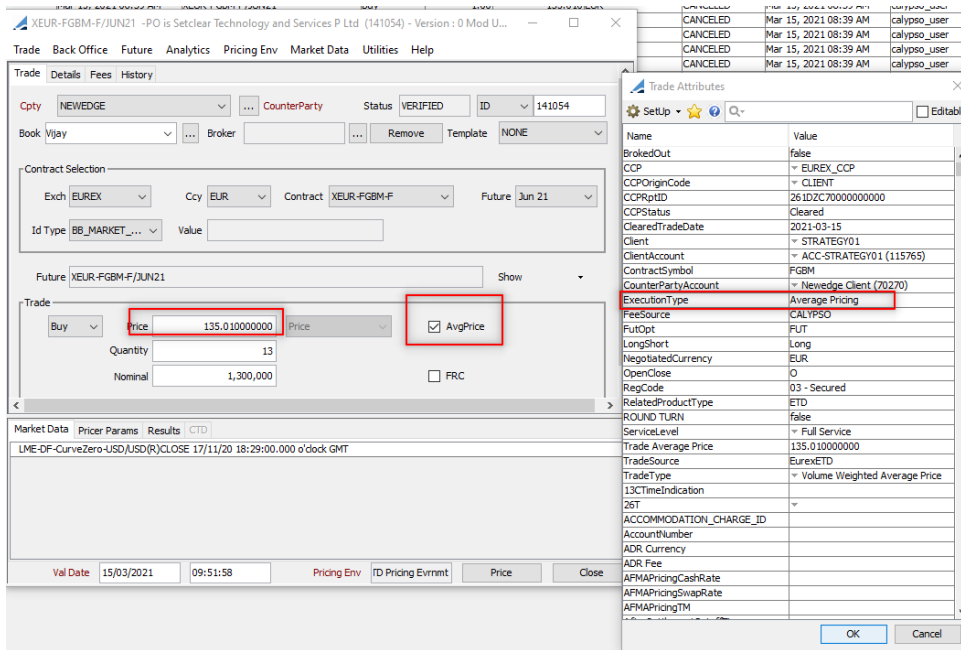
New merged trade fixml received

```

1  <?xml version="1.0" encoding="UTF-8" ?>
2  <FIXML xmlns="www.eurexchange.com/technology">
3    <TrdCaptRpt RptID="261D8C7000000000" TransType="0" RptType="0" TrdType="51" TrdHandInst="0" TransfrRsn="011" LastQty="13" LastPx="135.01" Ccy="EUR" LastHkt="XBUR" TrdDt="2021-03-16" BizDt="2021-03-16" MLegRptType="1"
4      LastUpdateDt="2021-03-15T08:46:44.096Z" Bids="0">
5      <Rpt SID="RCAG" TID="CALXV" Snt="2021-03-10T08:46:44.253+00:00"/>
6      <Pty ID="CALXV" R="4"/>
7      <Pty ID="CALXV" R="1"/>
8      <Pty ID="AI" R="38"/>
9      <Pty ID="SIN001" R="12"/>
10     <Instmt Sym="FGBM" MDT="202106"/>
11     <Amt Typ="CRES" Amt="0"/>
12     <TrdRegTS TS="2021-03-15T08:46:44.096+00:00" Typ="7"/>
13     <RptSide Side="1" PosEffect="0" AlloInd="0" CustOrdInst="0">
14       <Qty Typ="PA" Long="0" Short="0"/>
15       <Qty Typ="TOT" Long="2204" Short="2107"/>
16       <Qty Typ="ALC" Long="69" Short="0"/>
17     <ReltdPos ID="LMAH1" Src="3"/>
18   </RptSide>
19 </TrdCaptRpt>
20 </FIXML>

```

Merged Trade created with AvgPrice tick and Trade Keywords.



The screenshot shows the 'Trade' window in the Nasdaq Calypso interface. The 'Contract Selection' section shows 'Exch: EUREX', 'Ccy: EUR', 'Contract: XEUR-FGBM-F', and 'Future: Jun 21'. The 'Trade' section shows 'Buy' order with 'Price: 135.01000000', 'Quantity: 13', and 'Nominal: 1,300,000'. The 'AvgPrice' checkbox is checked. The 'Trade Attributes' window is open on the right, showing details like 'Name: XEUR-FGBM-F', 'BrokeredOut: false', 'CCP: EUREX CCP', 'CCPOriginCode: CLIENT', 'CCPRefID: 261DZC7000000000', 'CCPStatus: Cleared', 'ClearedTradeDate: 2021-03-15', 'Client: STRATEGY01', 'ClientAccount: ACC-STRATEGY01 (115765)', 'ContractSymbol: FGBM', 'CounterPartyAccount: Newedge Client (70270)', 'ExecutionType: Average Pricing', 'FeeSource: CALYPSO', 'FutOpt: FUT', 'LongShort: Long', 'NegotiatedCurrency: EUR', 'OpenClose: O', 'RegCode: 03 - Secured', 'RelatedProductType: ETD', 'ROUND TURN: false', 'ServiceLevel: Full Service', 'Trade Average Price: 135.01000000', 'TradeSource: EurexETD', 'TradeType: Volume Weighted Average Price', '13CtimeIndication: 26T', 'ACCOMMODATION_CHARGE_ID', 'AccountNumber', 'ADR Currency', 'ADR Fee', 'AFMAPricingCashRate', 'AFMAPricingSwapRate', and 'AFMAPricingITM'.

6.5.2 De-Merge

You can de-merge trades in C7.

Fixml received to cancel the Merge trade.

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <FIXML xmlns="http://www.eurexchange.com/technology">
3    <TrdCapRpt RptID="261DZC7000000000" TransfRpt="0" RptType="0" TrdType="51" TrdHandInst="0" TransfRpt="012" RptRefID="261DZC7000000000" LastQty="13" LastPx="135.01" Ccy="EUR" LastMkt="XBUR" TrdDt="2021-03-16" BizDt="2021-03-16" MlegRptType="1" LastUpdate="2021-03-15T09:54:25.614+00:00">
4      <Hdr SID="EAG" IID="CALXV" Snt="2021-03-15T09:54:25.614+00:00">
5        <Pty ID="CALXV" R="4"/>
6        <Pty ID="CALXV" R="1"/>
7        <Pty ID="A1" R="38"/>
8        <Pty ID="SIM001" R="12"/>
9        <Instmt Sys="FGBM" Mkt="202106"/>
10       <Amc Type="CBBS" R="0"/>
11       <TrdRegTS TS="2021-03-15T08:46:44.096+00:00" Typ="7"/>
12       <RptSide Side="1" PosEff="0" AllocInd="0" CustOrdHdInst="D">
13         <Qty Typ="TOT" Long="2204" Short="2109"/>
14         <Qty Typ="ALC" Long="69" Short="0"/>
15         <Qty Typ="BA" Long="0" Short="0"/>
16         <ReltdPos ID="LMAH1" Src="3"/>
17       </RptSide>
18     </TrdCapRpt>
19   </FIXML>

```

New trade created for demerged, fixml message attached below is for one of the messages out of 8 fixmls

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <FIXML xmlns="http://www.eurexchange.com/technology">
3    <TrdCapRpt RptID="261DZC7000000000" TransfRpt="0" RptType="0" TrdType="0" TrdHandInst="0" TransfRpt="012" RptRefID="261DZC7000000000" MchID="87" LastQty="1" LastPx="135.01" Ccy="EUR" LastMkt="XBUR" TrdDt="2021-03-16" BizDt="2021-03-16" MlegRptType="1" LastUpdate="2021-03-15T09:54:25.614+00:00">
4      <Hdr SID="EAG" IID="CALXV" Snt="2021-03-15T09:54:25.614+00:00">
5        <Pty ID="CALXV" R="4"/>
6        <Pty ID="CALXV" R="1"/>
7        <Pty ID="A1" R="38"/>
8        <Pty ID="SIM001" R="12"/>
9        <Pty ID="CALXVIM001" R="11"/>
10       <Instmt Sys="FGBM" Mkt="202106"/>
11       <TrdRegTS TS="2021-03-15T08:39:41.658+00:00" Typ="1"/>
12       <TrdRegTS TS="2021-03-15T08:39:41.675+00:00" Typ="2"/>
13       <TrdRegTS TS="2021-03-15T08:39:41.694+00:00" Typ="7"/>
14       <RptSide Side="1" TrdID="07800" PosEff="0" TrdID="1001" AllocInd="0" AgrsInd="Y" OrdCat="1" CustOrdHdInst="D">
15         <TrdRegTS TS="2021-03-15T08:38:57.878+00:00" Typ="8"/>
16         <Qty Typ="TOT" Long="2204" Short="2109"/>
17         <Qty Typ="ALC" Long="69" Short="0"/>
18         <Qty Typ="BA" Long="0" Short="0"/>
19         <TrdRptOrdDetl OrdID="1615497181495003369" OrdType="1" OrdStat="2">
20           <OrdQty Qty="1"/>
21         </TrdRptOrdDetl>
22         <ReltdPos ID="LMAH1" Src="3"/>
23       </RptSide>
24     </TrdCapRpt>
25   </FIXML>

```



Fixml received to cancel parent trade.

March 2025

Long Name Client 4 PLC

XEUR-OGBM-O/PUT/133.750/APR21 -PO is Setclear Technology and Services P Ltd (140530) - Version :...

Trade Back Office FutureOption Analytics Pricing Env Market Data Utilities Help

Trade Details Fees

NEWEDGE CounterParty Status CANCELED ID 140530

Book Vijay Broker Remove Template NONE

Contract Selection

Exchange EUREX Currency EUR Option Contract XEUR-OGBM-O Future Apr 21

Id Type BB_MARKET_... Value

Option XEUR-OGBM-O/PUT/133.750/APR21

Underlying XEUR-FGBM-F/JUN21

Trade

Strike 133.750 133.750

SELL Quantity 25

Price 1.2700 Price

PUT Nominal 2,500,000

Market Data Pricer Params Results

LME-DF-CurveZero-USD/USD(R)CLOSE 17/11/20 18:29:00.000 o'clock GMT

DIS ZC EUR Euribor/EUR(R)CLOSE 03/01/12 22:00:00.000 o'clock GMT

Val Date 12/03/2021 09:57:23 Pricing Env ETD Pricing E

STRATEGY01 Pvt Ltd 0010

STRATEGY01 Pvt Ltd 0011

STRATEGY01 Pvt Ltd 0012

STRATEGY01 Pvt Ltd 0013

Trade Attributes

Setup ☆ ? Q Editable

Name	Value
BrokeredOut	false
CCP	EUREX_CCP
CCPClearedDatetime	2021-03-12T08:53:42.412+00:00
CCPOriginCode	CLIENT
CCPRptID	2610MVC0000000005
CCPRptRefID	2610MVC0000000004
CCPStatus	Cleared
ClearedTradeDate	2021-03-12
Client	CLIENT 4
ClientAccount	CL00010 (124777)
ContractSymbol	OGBM
CounterPartyAccount	Newedge HOUSE (70274)
ExecutionType	Split
FeeSource	CALYPSO
FutOpt	OPT
NegotiatedCurrency	EUR
OpenClose	O
OrderId	1615493523872465088
RegCode	03 - Secured
RelatedProductType	ETD
ROUND TURN	false
ServiceLevel	Full Service
TradeSource	EurexETD
TradeType	Regular Trade

OK Cancel

Fixml received two create new split trades

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="www.eurexchange.com/technology">
3   <TrdCaptRpt RptID="2610MVC0000000006" TradeType="0" RptType="0" TrdType="0" TrdHandlInst="0" TransfSrc="00" RptRefID="2610MVC0000000004" MchID="1" LastQty="12" LastPx="1.27" Ccy="EUR" LastMkt="XEUR" TrdDt="2021-03-16" BizDt="
4     <Hdr SID="BCAO" IID="CALXV" Snt="2021-03-12T10:21:38.292+00:00"/>
5     <Pty ID="CALXV" R="4"/>
6     <Pty ID="CALXV" R="1"/>
7     <Pty ID="P1" R="38"/>
8     <Pty ID="SIM001" R="12"/>
9     <Pty ID="CALXVIM001" R="11"/>
10    <Instrc Typ="00RM" MchID="202104" StrkPx="133.75" OptAct="0" PutCall="1"/>
11    <Amc Typ="PRBM" Amt="0"/>
12    <TrdRegTS TS="2021-03-12T08:53:42.399+00:00" Typ="1"/>
13    <TrdRegTS TS="2021-03-12T08:53:42.412+00:00" Typ="2"/>
14    <TrdRegTS TS="2021-03-12T08:53:42.451+00:00" Typ="7"/>
15    <RptSide Side="2" TrdID="318767504" PosEffct="0" AllocInd="0" AgresInd="Y" OrdCat="1" CustOrdHdlInst="D">
16      <TrdRegTS TS="2021-03-12T08:53:42.399+00:00" Typ="8"/>
17      <Qty Typ="TOT" Long="0" Short="25"/>
18      <Qty Typ="ALC" Long="0" Short="0"/>
19      <Qty Typ="BA" Long="0" Short="0"/>
20      <TrdRptOrdDet1 OrdID="1615493523872465088" OrdTyp="2" OrdStat="2">
21        <OrdQty Qty="25"/>
22      </TrdRptOrdDet1>
23      <ReltdPos ID="W99K3" Szc="3"/>
24    </RptSide>
25    </TrdCaptRpt>
26  </FIXML>

```

```
<?xml version="1.0" encoding="UTF-8"?>
<FIXML xmlns="www.eurexchange.com/techoology">
  <TrdCapRpt RptID="2610MVC0000000007" RptType="0" TrdType="0" TrdHandInst="0" TransfRan="006" RptRefID="2610MVC0000000004" MschID="1" LastQty="13" LastPx="1.27" Ccy="EUR" LastMkt="XEUR" TrdDt="2021-03-16" BizDt="2021-03-16" MLegRptType="1" LastUpdateTime="2021-03-12T10:21:38.221+00:00">
    <Hdr SID="BOAD" TID="CALXV" Snt="2021-03-12T10:21:38.293+00:00"/>
    <Pty ID="CALXV" Snt="1"/>
    <Pty ID="CALXV" R="1"/>
    <Pty ID="P1" R="38"/>
    <Pty ID="SIM001" R="12"/>
    <Pty ID="CALXV3IM001" R="13"/>
    <Instmnt Sys="OGBM" Mkt="202104" StrkPx="133.75" OptAt="0" PutCall="1"/>
    <Amt Typ="PRM" Amt="0"/>
    <TrdRegTS TS="2021-03-12T08:53:42.399+00:00" Typ="1"/>
    <TrdRegTS TS="2021-03-12T08:53:42.412+00:00" Typ="2"/>
    <TrdRegTS TS="2021-03-12T08:53:42.431+00:00" Typ="77"/>
    <RptSide Side="2" TrdID="318767504" PosEff="0" AllocInd="0" AgrInd="Y" OrdCat="1" CustOrdHdlInst="D">
      <TrdRegTS TS="2021-03-12T08:53:42.399+00:00" Typ="8"/>
      <Qty Typ="TOT" Long="0" Short="25"/>
      <Qty Typ="ALC" Long="0" Short="0"/>
      <Qty Typ="BA" Long="0" Short="0"/>
      <TrdRptOrdDetl OrdID="1615493523872465088" OrdType="2" OrdStat="2">
        <OrdQty Qty="25"/>
        <TrdRptOrdDetl>
          <RelatPos ID="WFSM3" Src="3"/>
        </TrdRptOrdDetl>
      </RptSide>
    </TrdCapRpt>
  </FIXML>
```

Split trade received in Trade browser

Client Account	CounterParty Account	Trade ID	External Reference	Product Type	Trade Date	Product Description	Buy/Sell	Quantity	Trade Price	Trade Currency	Trade Status	Entered Date	Entered User	Book	CounterParty	Trader	Settle Cur.
BROR_ACCT	NEWEDGE HOUSE	140538	EURX-2610MVC0000000007	FutureOptionBond	Mar 12, 2021 06:53 AM	EURX-OGM-O/PUT/133.750/APR21	Sell	(13.00)	1.2700	EUR	EXECUTIONONLY	Mar 12, 2021 10:21 AM	calypso_user	Vijay	NEWEDGE		EUR
BROR_ACCT	NEWEDGE HOUSE	140534	EURX-2610MVC0000000008	FutureOptionBond	Mar 12, 2021 06:53 AM	EURX-OGM-O/PUT/133.750/APR21	Sell	(12.00)	1.2700	EUR	EXECUTIONONLY	Mar 12, 2021 10:21 AM	calypso_user	Vijay	NEWEDGE		EUR

Trade Details Fees

NEWEDGE CounterParty Status EXECUTIONONLY ID 140538

Book Vijay Broker

Contract Selection

Exchange EUREX Currency EUR Option Cont

Id Type BB_MARKET Value

Option XEUR-OGM-O/PUT/133.750/APR21

Underlying XEUR-FGBM-F/JUN21

Trade

Strike 133.750 133.750

Quantity 13

Price 1.2700

Nominal 1,300,000

Market Data Pricer Params Results

LME-OF-CurveZero-USD/USD(R)CLOSE 17/11/20 18:29:00.000 o'clock GMT

DIS ZC EUR Euribor/EUR(R)CLOSE 03/01/12 22:00:00.000 o'clock GMT

Val Date 12/03/2021 10:26:34 Pricing Env ETD Pricing Env

Trade Attributes

Setup

Name Value

BrokeredOut false

CCP EUREX CCP

CCPclearedDate 2021-03-12T08:53:42.412+00:00

CCPOrigCode CLIENT

CCPRptID 2610MVC0000000007

CCPRptRefID 2610MVC0000000004

CCPStatus Cleared

ClearedTradeDate 2021-03-12

Client ERROR ACCT (89759)

ClientAccount ERROR ACCT (89759)

ContractSymbol OGBM

CounterPartyAccount NEWEDGE HOUSE (70274)

ExecutionType Split

FreeSource CALYPSO

PutOpt OPT

NegotiatedCurrency EUR

OpenClose O

OrderID 1615493523872465088

RegCode 03 - Secured

RelatedProductType ETD

ROUND TURN false

ServiceLevel Full Service

TradeSource EurexETD

TradeType Regular Trade

13CTimeIndication

26T

ACCOMMODATION_CHARGE_ID

AccountNumber

ADR Currency

OK Cancel

Trade Details Fees

NEWEDGE CounterParty Status EXECUTIONONLY ID 140534

Book Vijay Broker

Contract Selection

Exchange EUREX Currency EUR Option Contract

Id Type BB_MARKET Value

Option XEUR-OGM-O/PUT/133.750/APR21

Underlying XEUR-FGBM-F/JUN21

Trade

Strike 133.750 133.750

Quantity 12

Price 1.2700

Nominal 1,200,000

Market Data Pricer Params Results

LME-OF-CurveZero-USD/USD(R)CLOSE 17/11/20 18:29:00.000 o'clock GMT

DIS ZC EUR Euribor/EUR(R)CLOSE 03/01/12 22:00:00.000 o'clock GMT

Val Date 12/03/2021 10:27:09 Pricing Env ETD Pricing Env

Trade Attributes

Setup

Name Value

BrokeredOut false

CCP EUREX CCP

CCPclearedDate 2021-03-12T08:53:42.412+00:00

CCPOrigCode CLIENT

CCPRptID 2610MVC0000000006

CCPRptRefID 2610MVC0000000004

CCPStatus Cleared

ClearedTradeDate 2021-03-12

Client ERROR ACCT (89759)

ClientAccount ERROR ACCT (89759)

ContractSymbol OGBM

CounterPartyAccount NEWEDGE HOUSE (70274)

ExecutionType Split

FreeSource CALYPSO

PutOpt OPT

NegotiatedCurrency EUR

OpenClose O

OrderID 1615493523872465088

RegCode 03 - Secured

RelatedProductType ETD

ROUND TURN false

ServiceLevel Full Service

TradeSource EurexETD

TradeType Regular Trade

13CTimeIndication

26T

ACCOMMODATION_CHARGE_ID

OK Cancel

6.7 Exercise

Trade is exercised in C7.

Fixml received in TradeConfirmation queue.

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <FIXML xmlns="www.eurexchange.com/technology">
3   <PosMntRpt RptID="26102B400000000000" TknTyp="1" Actn="1" Stat="3" TrnsfrRsn="110" BizDt="2021-03-16" Coy="EUR" TknTm="2021-03-15T07:48:13.306+00:00" Txt2="1001" ExrMethod="M" PosID="MPYL7">
4     <Hdr SID="BCAG" TID="CALXV" Sst="2021-03-15T07:48:13.363+00:00"/>
5     <Pty ID="CALXV" R="4"/>
6     <Pty ID="CALXV" R="1"/>
7     <Pty ID="AI" R="38"/>
8     <Pty ID="SIM001" R="12"/>
9     <Instrmt Sym="OGBL" Mnt="202104" StrkFx="159" OptAt="0" PutCall="1"/>
10    <Qty Typ="TX" Long="25"/>
11    <Qty Typ="TOT" Long="0" Short="0"/>
12    <Qty Typ="ALC" Long="0" Short="0"/>
13    <Qty Typ="PA" Long="25" Short="0"/>
14  </PosMntRpt>
15 </FIXML>
16

```

Exercise processed in Calypso

Trade Browser / Trade Browser

Report Data View Export Market Data Process Utilities Help

Client Account	CounterParty Account	Trade Id	External Reference	Product Type	Trade Date	Product Description	Buy/Sell	Quantity	Trade Price	Trade Currency	TradeStatus	Entered Date	Entered User	Book	CounterParty	Trader	Settle Cur.
CL0009	Newedge Client	140978	EUREX_2607MP7000000000	FutureBond	Mar 15, 2021 05:15 PM	XEUR-FGBL-F/JUN21	Sell	(25.00)	159.000EUR	EUR	VERIFIED	Mar 15, 2021 07:58 AM	calypso_user	Vijay	NEWEDGE		EUR
CL0009	Newedge Client	140979	EUREX_2607MP7000000000	FutureOptionBond	Mar 15, 2021 05:15 PM	XEUR-OGBL-O/PUT/159.000/APR21	Sell	(25.00)	0.000EUR	EUR	VERIFIED	Mar 15, 2021 07:58 AM	calypso_user	Vijay	NEWEDGE		EUR

XEUR-OGBL-O/PUT/159.000/APR21 -PO is Setclear Technology and Services P Ltd (140979) - Version : ...

Trade Back Office FutureOption Analytics Pricing Env Market Data Utilities Help

Trade Details Fees

NEWEDGE CounterParty Status VERIFIED ID 140979

Book Vijay Broker Remove Template NONE

Contract Selection

Exchange EUREX Currency EUR Option Contract XEUR-OGBL-O Future Apr 21

Id Type BB_MARKET_... Value

Option XEUR-OGBL-O/PUT/159.000/APR21

Underlying XEUR-FGBL-F/JUN21

Trade

Strike 159.000 159.000

Quantity 25

Price 0.000 Price

Nominal 2,500,000

Market Data Pricer Params Results

LME-OF-CurveZero-USD/USD(R)CLOSE 17/11/20 18:29:00.000 o'clock GMT

ZC EUR Euribor/EUR(R)CLOSE 03/01/12 22:00:00.000 o'clock GMT

Val Date 15/03/2021 08:11:06 Pricing Env ETD Pricing Evnmt

Trade Attributes

Name Value

BrokenOut false

CCP EUREX_CCP

CCPOriginCode CLIENT

CCPStatus Cleared

ClearedTradeDate 2021-03-15

Client CLIENT 3 STD

ClientAccount CL0009 (78260)

ContractSymbol OGBL

CounterPartyAccount Newedge Client (70270)

ExecutionType OPTION EXERCISE

ExercisedOption 140430

ExercisedUnder 140978

FutOpt OPT

LiqConfigId 1111

LiquidableWith 140430

PosAggId 13510

RegCode 03 - Secured

RelatedProductType ETD

ROUND TURN false

ServiceLevel Full Service

TerminationType CloseOut

TradeSource LIFECYCLE EVENT

TransferTo 140978

13CTimeIndication 26T

ACCOMMODATION_CHARGE_ID

AccountNumber

ADR Currency

OK Cancel

6.8 Position Transfer

Position transfer is done in C7.

Fixml message to closeout for parent position.

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <FIXML xmlns="www.eurexchange.com/technology">
3    <PosNtrRpt RptID="261890000000000000" TxnType="1000" Acta="1" Stat="3" TrnsfrRsn="102" BizDt="2021-03-16" Coy="EUR" TxnTm="2021-03-15T12:34:54.742+00:00" Txt2="1001" TrnsftMode="1" PosID="LMAN1">
4      <Hdr SID="BCAG" IID="CALXV" Snt="2021-03-15T12:34:54.765+00:00"/>
5      <Pty ID="CALXV" R="4"/>
6      <Pty ID="CALXV" R="1"/>
7      <Pty ID="AL" R="38"/>
8      <Pty ID="SIM001" R="12"/>
9      <Instrmt Sym="FGBM" MNY="202106"/>
10     <Qty Typ="TRF" Long="24" Short="0"/>
11     <Qty Typ="TOT" Long="2180" Short="2110"/>
12     <Qty Typ="ALC" Long="69" Short="0"/>
13     <Qty Typ="PA" Long="24" Short="0"/>
14   </PosNtrRpt>
15 </FIXML>
16

```

Fixml message to open a new position.

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <FIXML xmlns="www.eurexexchange.com/technology">
3    <PosNtrRpt RptID="261890000000000000" TxnType="1000" Acta="1" Stat="3" TrnsfrRsn="102" BizDt="2021-03-16" Coy="EUR" TxnTm="2021-03-15T12:34:54.742+00:00" TrnsftMode="1" PosID="MM033">
4      <Hdr SID="BCAG" IID="CALXV" Snt="2021-03-15T12:34:54.765+00:00"/>
5      <Pty ID="CALXV" R="4"/>
6      <Pty ID="CALXV" R="1"/>
7      <Pty ID="AL" R="38"/>
8      <Pty ID="SIM001" R="12"/>
9      <Instrmt Sym="FGBM" MNY="202106"/>
10     <Qty Typ="TRF" Long="24" Short="0"/>
11     <Qty Typ="TOT" Long="79" Short="0"/>
12     <Qty Typ="ALC" Long="0" Short="0"/>
13     <Qty Typ="PA" Long="24" Short="0"/>
14   </PosNtrRpt>
15 </FIXML>
16

```

Position transfer are treated in calypso as new trade.

Trade Browser / Trade Browser															
Report Data View Export Market Data Process Utilities Help															
Criteria															
Client Account	CounterParty Account	Trade Id	External Reference	Product Type	Trade Date	Product Description	Buy/Sell	Quantity	Trade Price	Trade Currency	TradeStatus	Entered Date	Entered User	Book	CounterParty
20009	newedge client	141119	ELREX_2618900000000000	FutureBond	Mar 15, 2021 12:34 AM	XEUR-FGBM-FZJUN21	Sell	(24.00)	0.000	EUR	VERIFIED	Mar 15, 2021 12:34 PM	calypso_user	Vjpay	NEWEDGE
ACC-STRATEGY01	newedge HOUSE	141119	ELREX_2618900000000000	FutureBond	Mar 15, 2021 12:34 AM	XEUR-FGBM-FZJUN21	Buy	24.00	0.000	EUR	VERIFIED	Mar 15, 2021 12:34 PM	calypso_user	Vjpay	NEWEDGE
Trader	Settle Cur.														
	EUR														
	EUR														

Release Notes

7.1 Version 1.0.2 – April 2021

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.0.2		RPM-4312	EUREXETD-2	Enh	Issue – Add support for Eurex ETD interface. Fix – Eurex ETD interface has been added.
Eurex ETD 1.0.2		RPM-4312	EUREXETD-9	Enh	Issue - Add required calypso mappings to Eurex ETD schema data.

7.2 Version 1.0.3 – May 2021

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.0.3			EUREXETD-16	Enh	Issue – Eurex ETD - For Amendment, add Park and Process feature in BO Message report when Parent trade is not present. Fix – Added Park and Process feature to re-trigger the Allocation report if it comes before the Trade Capture report. See Workflow Configuration above.

7.3 Version 1.0.4, 1.0.5 – July 2021



Note: Change to message attribute UploadObjectExternalRef – See issue EUREXETD-31 below for details.

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.0.5	00017711	RPM-5864	EUREXETD-26	Enh	Issue – ETD Interface – Eurex ETD & FCM Trade Interface to support Multiple Legal Entity and ClearingExchangeTicker from multiple fields from CCPs. Fix – When ElectronicExchangeTicker is configured in the mapping as below, and found in the input file, ClearingExchangeTicker is ignored. Name = EurexETD/FieldMapping Interface Value = AllocRpt/Instrmt@ProdCmplx Calypso Value = ElectronicExchangeTicker Name = EurexETD/FieldMapping

Component	HD/Case	RPM	Issue	Type	Description
					Interface Value = TrdCaptRpt/Instrmt@ProdCmplx Calypso Value = ElectronicExchangeTicker Name = EurexETD/FieldMapping Interface Value = PosMntRpt/Instrmt@ProdCmplx Calypso Value = ElectronicExchangeTicker Multiple CCPs can be set in the following mapping: Name = EurexETD/LegalEntity Interface Value = ECAG Calypso Value = EUREXOTC,EUREX The first legal entity uses ElectronicExchangeTicker (if configured) to look up the product. Otherwise, the second legal entity uses ClearingExchangeTicker to look up the product.
Eurex ETD 1.0.5			EUREXETD-21	Enh	Issue - Add message attributes for Eurex ETD to domain through Execute SQL. Fix - Message attributes are created through Execute SQL.
Eurex ETD 1.0.5	00018397		EUREXETD-31	Issue	Issue - Eurex ETD Public broadcast message performance issue and message attribute UploadObjectExternalRef set to the same value for every message. Impact Analysis - Message attribute UploadObjectExternalRef is set as "EurexETD_public_<message type>_<creation time>" instead of "EurexETD_public_<message type>" and removed check of linked messages.

7.4 Version 1.1.0 – August 2021

 **Note: Change to message attribute UploadObjectExternalRef – See issue EUREXETD-31 below for details.**

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.1.0		RPM-4313	EUREXETD-33	Enh	Issue - Technical issue - Changes for using "internal" Data Uploader module.
Eurex ETD 1.1.0	00018397		EUREXETD-30	Issue	Issue - Eurex ETD Public broadcast message performance issue and message attribute

Component	HD/Case	RPM	Issue	Type	Description
					UploadObjectExternalRef set to the same value for every message. Impact Analysis – Message attribute UploadObjectExternalRef is set as "EurexETD_public_<message type>_<creation time>" instead of "EurexETD_public_<message type>" and removed check of linked messages. Already in version 1.0.5.
Eurex ETD 1.1.0	00017711	RPM-5864	EUREXETD-25	Enh	Issue – ETD Interface – Eurex ETD & FCM Trade Interface to support Multiple Legal Entity and ClearingExchangeTicker from multiple fields from CCPs. Fix – When ElectronicExchangeTicker is configured in the mapping as below, and found in the input file, ClearingExchangeTicker is ignored. Name = EurexETD/FieldMapping Interface Value = AllocRpt/Instrmt@ProdCmplx Calypso Value = ElectronicExchangeTicker Name = EurexETD/FieldMapping Interface Value = TrdCaptRpt/Instrmt@ProdCmplx Calypso Value = ElectronicExchangeTicker Name = EurexETD/FieldMapping Interface Value = PosMntRpt/Instrmt@ProdCmplx Calypso Value = ElectronicExchangeTicker Multiple CCPs can be set in the following mapping: Name = EurexETD/LegalEntity Interface Value = ECAG Calypso Value = EUREXOTC,EUREX The first legal entity uses ElectronicExchangeTicker (if configured) to look up the product. Otherwise, the second legal entity uses ClearingExchangeTicker to look up the product. Already in version 1.0.5.
Eurex ETD 1.1.0			EUREXETD-23	Enh	Issue - Add message attributes for Eurex ETD to domain through Execute SQL. Fix – Message attributes are created through Execute SQL. Already in version 1.0.5.

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.1.0			EUREXETD-15	Enh	Issue – Eurex ETD – For Amendment, add Park and Process feature in BO Message report when Parent trade is not present. Fix – Added Park and Process feature to re-trigger the Allocation report if it comes before the Trade Capture report. See Workflow Configuration above. Already in version 1.0.3.
Eurex ETD 1.1.0		RPM-4312	EUREXETD-8	Enh	Issue - Add required calypso mappings to Eurex ETD schema data. Already in version 1.0.2.

7.5 Version 1.3.1 – May 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.3.1			EUREXETD-77	Enh	Issue – Update CSV mapping file with Eurex Next Generation fields. Fix – Updated CALYPSOMAPPING_EurexETD_NEW.csv with Eurex Next Generation fields.
Eurex ETD 1.3.1	00019304	RPM-6486	EUREXETD-76	Enh	Issue – Add Eurex Next Generation date format. Fix - Added ContractPromptMonth_Date field formatted as yyyyMMdd to populate the Prompt Month based on the following mapping: Interface Name = EurexETD/FieldMapping Interface Value = TrdCaptRpt/Instrmt@ContractDate Calypso Value = ContractPromptMonth_Date If the mapping is not present, the Prompt Month is taken from the PromptMonth_Date mapping or from the Expiration_Date otherwise.

7.6 Version 1.3.2, 1.3.3, 1.3.4 – June 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.3.4	00031125		EUREXETD-85	Issue	Issue – Update latest CSV and Schema file to EurexETD package.

Component	HD/Case	RPM	Issue	Type	Description
					Impact Analysis - Local impact – Updated CALYPSOMAPPING_EurexETD_NEW.csv and EurexETDSchemaData.xml.
Eurex ETD 1.3.4	00033757		EUREXETD-85	Issue	Issue - Allocation Messages during TakeUp are blocked if Update Manager engine is too slow. Impact Analysis – Local impact to EurexETDFIXMLTranslator.
Eurex ETD 1.3.4	00019304	RPM-6997	EUREXETD-76	Enh	Issue – Add Eurex Next Generation date format. Fix - Added ContractPromptMonth_Date field formatted as yyyyMMdd to populate the Prompt Month based on the following mapping: Interface Name = EurexETD/FieldMapping Interface Value = TrdCaptRpt/Instrmt@ContractDate Calypso Value = ContractPromptMonth_Date If the mapping is not present, the Prompt Month is taken from the PromptMonth_Date mapping or from the Expiration_Date otherwise.

7.7 Version 1.3.5 – July 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.3.5	00033757		EUREXETD-96	Issue	Issue – Allocation Messages during TakeUp are blocked because of ordering issue. Impact Analysis – Local impact - TrdCaptRpt and AllocRpt to have same UOER so that those messages are sent to the same thread and processed sequentially.

7.8 Version 1.3.6 – July 2022

 **Note:** Data model changes – See issue EUREXETD-105 for details.

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.3.6	00035587		EUREXETD-105	Enh	Issue – Missing keywords after adjustments on Eurex Take-ups.

Component	HD/Case	RPM	Issue	Type	Description
					Fix - Updated EurexETDSchemaData.xml and CALYPSOMAPPING_EurexETD_NEW.csv with mapping values "CopyKeywordsLookupForNew" and "CopyKeywordsLookupForCancel". When a NEW message is received after a CANCEL message, the mapping CopyKeywordsLookupForNew determines the criteria to lookup the cancel message to copy the trade keywords to the new trade. When a CANCEL message is received after a NEW message, the mapping CopyKeywordsLookupForCancel determines the criteria to lookup the new message to copy the trade keywords to the new trade. The mapping values CopyKeywordsLookup and ValidActionsForCopyKeywords are no longer used and have been removed.

7.9 Version 1.4.0 – March 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.4.0	00019304	RPM-6486	EUREXETD-61	Enh	Issue – Add Eurex Next Generation date format. Fix - Added ContractPromptMonth_Date field formatted as yyyyMMdd to populate the Prompt Month based on the following mapping: Interface Name = EurexETD/FieldMapping Interface Value = TrdCaptRpt/Instrmt@ContractDate Calypso Value = ContractPromptMonth_Date If the mapping is not present, the Prompt Month is taken from the PromptMonth_Date mapping or from the Expiration_Date otherwise.
Eurex ETD 1.4.0	00018431	RPM-6209	EUREXETD-57	Enh	Issue - Create Task Station entries whenever EurexETD IncomingFeed is started and stopped. Fix – Added log entries whenever EurexETD IncomingFeed is started and stopped.

7.10 Version 1.5.0 – April 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.5.0			EUREXETD-74	Enh	Issue – Update CSV mapping file with Eurex Next Generation fields. Fix – Updated CALYPSOMAPPING_EurexETD_NEW.csv with Eurex Next Generation fields.

7.11 Version 1.6.0 – July 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.6.0	00033757		EUREXETD-97	Issue	Issue – Allocation Messages during TakeUp are blocked because of ordering issue. Impact Analysis – Local impact - TrdCaptRpt and AllocRpt to have same UOER so that those messages are sent to the same thread and processed sequentially.
Eurex ETD 1.6.0	00031125		EUREXETD-86	Issue	Issue – Update latest CSV and Schema file to EurexETD package. Impact Analysis - Local impact – Updated CALYPSOMAPPING_EurexETD_NEW.csv and EurexETDSchemaData.xml.
Eurex ETD 1.6.0	00033757		EUREXETD-84	Issue	Issue - Allocation Messages during TakeUp are blocked if Update Manager engine is too slow. Impact Analysis – Local impact to EurexETDFIXMLTranslator.

7.12 Version 1.6.1 – October 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.6.1	00039643 00035587		EUREXETD-112	Enh	Issue – Missing keywords after adjustments on Eurex Take-ups. Fix - Updated EurexETDSchemaData.xml and CALYPSOMAPPING_EurexETD_NEW.csv with mapping values “CopyKeywordsLookupForNew” and “CopyKeywordsLookupForCancel”.

Component	HD/Case	RPM	Issue	Type	Description
					When a NEW message is received after a CANCEL message, the mapping CopyKeywordsLookupForNew determines the criteria to lookup the cancel message to copy the trade keywords to the new trade. When a CANCEL message is received after a NEW message, the mapping CopyKeywordsLookupForCancel determines the criteria to lookup the new message to copy the trade keywords to the new trade. The mapping values CopyKeywordsLookup and ValidActionsForCopyKeywords are no longer used and have been removed.

7.13 Version 1.7.0 – September 2022

 **Note:** Data model changes – See issue EUREXETD-106 for details.

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 1.7.0	00035587		EUREXETD-106	Enh	Issue – Missing keywords after adjustments on Eurex Take-ups. Fix - Updated EurexETDSchemaData.xml and CALYPSOMAPPING_EurexETD_NEW.csv with mapping values "CopyKeywordsLookupForNew" and "CopyKeywordsLookupForCancel". When a NEW message is received after a CANCEL message, the mapping CopyKeywordsLookupForNew determines the criteria to lookup the cancel message to copy the trade keywords to the new trade. When a CANCEL message is received after a NEW message, the mapping CopyKeywordsLookupForCancel determines the criteria to lookup the new message to copy the trade keywords to the new trade. The mapping values CopyKeywordsLookup and ValidActionsForCopyKeywords are no longer used and have been removed.

7.14 Version 1.8.0 – January 2023

 **Note: Data model changes – See issue EUREXETD-116 for details.**

Capability	Component	Case	RPM	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 2.6.0	00034270	APL- 1366	EUREXETD- 116	Enh	Issue – Cancel/Refused TakeUp not processed correctly. Impact Analysis – Added support for Cancel/Refused TakeUp - stat = 10 or 12 and rpttyp = 16. You need to add the following workflow transitions to the INCOMINGFEEDMSG message workflow: REPROCESSING – CANCEL – CANCELED PENDING – CANCEL – CANCELED The following mappings have been added: Name = EurexETD/TakeUpRefuseAndCancelLookup Interface Value = ExtRef Calypso Value = ExtRef Name = EurexETD/TakeUpRefuseAndCancelLookup Interface Value = ID2 Calypso Value = ID2 Name = EurexETD/MessageAction Interface Value = 1016 Calypso Value = CANCEL Name = EurexETD/MessageAction Interface Value = 1216 Calypso Value = CANCEL

7.15 Version 2.2.0 – March 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 2.2.0	00019304	RPM-6997	EUREXETD- 62	Enh	Issue – Add Eurex Next Generation date format.

Component	HD/Case	RPM	Issue	Type	Description
					Fix - Added ContractPromptMonth_Date field formatted as yyyyMMdd to populate the Prompt Month based on the following mapping: Interface Name = EurexETD/FieldMapping Interface Value = TrdCaptRpt/Instrmt@ContractDate Calypso Value = ContractPromptMonth_Date If the mapping is not present, the Prompt Month is taken from the PromptMonth_Date mapping or from the Expiration_Date otherwise.
Eurex ETD 2.2.0	00018431	RPM-6208	EUREXETD-58	Enh	Issue - Create Task Station entries whenever EurexETD IncomingFeed is started and stopped. Fix – Added log entries whenever EurexETD IncomingFeed is started and stopped.

7.16 Version 2.3.0 – April 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 2.3.0			EUREXETD-75	Enh	Issue – Update CSV mapping file with Eurex Next Generation fields. Fix – Updated CALYPSOMAPPING_EurexETD_NEW.csv with Eurex Next Generation fields.

7.17 Version 2.4.0 – July 2022

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 2.4.0	00033757		EUREXETD-98	Issue	Issue – Allocation Messages during TakeUp are blocked because of ordering issue. Impact Analysis – Local impact - TrdCaptRpt and AllocRpt to have same UOER so that those messages are sent to the same thread and processed sequentially.
Eurex ETD 2.4.0	00031125		EUREXETD-87	Issue	Issue – Update latest CSV and Schema file to EurexETD package.

Component	HD/Case	RPM	Issue	Type	Description
					Impact Analysis - Local impact – Updated CALYPSOMAPPING_EurexETD_NEW.csv and EurexETDSchemaData.xml.
Eurex ETD 2.4.0	00033757		EUREXETD-83	Issue	Issue - Allocation Messages during TakeUp are blocked if Update Manager engine is too slow. Impact Analysis – Local impact to EurexETDFIXMLTranslator.

7.18 Version 2.5.0 – September 2022

 **Note:** Data model changes – See issue EUREXETD-107 for details.

Component	HD/Case	RPM	Issue	Type	Description
Eurex ETD 2.5.0	00035587		EUREXETD-107	Enh	Issue – Missing keywords after adjustments on Eurex Take-ups. Fix - Updated EurexETDSchemaData.xml and CALYPSOMAPPING_EurexETD_NEW.csv with mapping values “CopyKeywordsLookupForNew” and “CopyKeywordsLookupForCancel”. When a NEW message is received after a CANCEL message, the mapping CopyKeywordsLookupForNew determines the criteria to lookup the cancel message to copy the trade keywords to the new trade. When a CANCEL message is received after a NEW message, the mapping CopyKeywordsLookupForCancel determines the criteria to lookup the new message to copy the trade keywords to the new trade. The mapping values CopyKeywordsLookup and ValidActionsForCopyKeywords are no longer used and have been removed.

7.19 Version 2.6.0 – January 2023

 **Note: Data model changes – See issue EUREXETD-117 for details.**

Capability	Component	HD/Case	RPM	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 2.6.0	00034270	APL- 922	EUREXETD- 117	Enh	Issue – Cancel/Refused TakeUp not processed correctly. Impact Analysis – Added support for Cancel/Refused TakeUp - stat = 10 or 12 and rpttyp = 16. You need to add the following workflow transitions to the INCOMINGFEEDMSG message workflow: REPROCESSING – CANCEL – CANCELED PENDING – CANCEL – CANCELED The following mappings have been added: Name = EurexETD/TakeUpRefuseAndCancelLookup Interface Value = ExtRef Calypso Value = ExtRef Name = EurexETD/TakeUpRefuseAndCancelLookup Interface Value = ID2 Calypso Value = ID2 Name = EurexETD/MessageAction Interface Value = 1016 Calypso Value = CANCEL Name = EurexETD/MessageAction Interface Value = 1216 Calypso Value = CANCEL

7.20 Version 2.7.0 – March 2023

Capability	Asset Class	Component	HD/Case	RPM	Issue	Type	Description
ETD EU /or FCM Clearing	Cross	Eurex ETD 2.7.0	00037039	APL- 4143	EUREXETD- 121	Enh	Issue – Add error task for connection issues.

Capability	Asset Class	Component	HD/Case	RPM	Issue	Type	Description
None Cross							Impact Analysis – The following mapping values need to be set to create an error task: Name = EurexETD/Translator Interface Value = CurrentAttemptTaskCreationCount Calypso Value = <number of failed attempts before creating the error task> Name = EurexETD/Translator Interface Value = AttemptCounterResetInterval Calypso Value = <number of milliseconds to reset the connection counter after a successful connection –It should be greater than recoveryInterval from datauploaderExternalURI.xml>

7.21 Version 2.8.0, 2.8.1, 2.8.2 – August 2023

Capability	Component	HD/Case	RPM	Issue	Type	Description
Integration Trades Data Integration Cross	Eurex ETD 2.8.2	00069369		EUREXETD-133	Enh	Issue – Include third party libraries in Eurex-ETD module. Impact Analysis – The following libraries are now included in Eurex ETD module: org.apache.qpid:proton-j org.apache.qpid:qpid-jms-client org.apache.geronimo.specs:geronimo-jms_2.0_spec org.apache.camel:camel-amqp io.netty:netty-buffer io.netty:netty-codec io.netty:netty-codec-http

Capability	Component	HD/Case	RPM	Issue	Type	Description
						io.netty:netty-common io.netty:netty-handler io.netty:netty-resolver io.netty:netty-transport io.netty:netty-transport-native-epoll io.netty:netty-transport-native-kqueue io.netty:netty-transport-native-unixcommon

7.22 Version 2.9.0, 2.10.0 – October 2023

Capability	Component	HD/Case	RPM	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 2.10.0	00038499	APL-627	EUREXETD-129	Enh	Issue – ClearConnect - Support for Trade clearing from Adenza instead of Eurex C7. Impact Analysis – Added support for Trade clearing from Adenza using ClearConnect. Added ability to map message attributes using the following mapping: Name = EuexETD/MessageAttributes Interface Value - <Eurex message attribute> Calypso Value = <Calypso message attribute> Please refer to Calypso ClearConnect documentation for details.

7.23 Version 2.10.1 – November 2024

Capability	Component	Case	APL	Issue	Type	Description
ETD EU /or FCM Clearing None	Eurex ETD 2.10.1	00136403	APL-12296	EUREXETD-271	Enh	Issue – Enrich UTI reporting keywords in trade attributes. Impact Analysis – The following trade keywords have been added:

Capability	Component	Case	APL	Issue	Type	Description
Cross						UTI-ETDCpty/TradeId = <UTIPrefix> + <UTIValue> UTIPrefix = 529900LN3S50JPU47S06 (hard-coded) UTIValue = For Trade report: T + <RptId> + <C for clearing or T otherwise> For Position report: P + <PosID> + <C for clearing or T otherwise>

7.24 Version 2.11.0 – February 2024

 **Note:** Change to eurexetd.properties.

Capability	Component	HD/Case	RPM	Issue	Type	Description
	Eurex ETD 2.11.0			EUREXETD-176	Enh	Issue – ClearConnect - Change in Request queue address. Impact Analysis – Change to eurexetd.properties - Request address defined as: topic.requestAddress = request.CALXV_CALXVCALYPSOFIX
	Eurex ETD 2.11.0			EUREXETD-184	Issue	Issue - Messages are in pending status in case of Auto Takeup. Impact Analysis - IncomingFeed message are no longer created for response messages.
	Eurex ETD 2.11.0			EUREXETD-180	Enh	Issue - ClearConnect - Capture reject text message as an attribute. Impact Analysis – Reject text message stored in message attribute RejTxt.

7.25 Version 3.4.0 – January 2024

 **Note:** Change to eurexetd.properties.

Capability	Component	HD/Case	APL	Issue	Type	Description
	Eurex ETD 3.4.0			EUREXETD-177	Enh	Issue – ClearConnect – Change in Request queue address. Impact Analysis – Change to eurexetd.properties – Request address defined as: topic.requestAddress = request.CALXV_CALXVCALYPSOFIX
	Eurex ETD 3.4.0			EUREXETD-185	Issue	Issue - Messages are in pending status in case of Auto Takeup. Impact Analysis - IncomingFeed message are no longer created for response messages.
	Eurex ETD 3.4.0			EUREXETD-188	Sec	Issue – Security – Upgrade io.netty:netty-handler library to version 4.1.101.Final.
	Eurex ETD 3.4.0			EUREXETD-181	Enh	Issue - ClearConnect – Capture reject text message as an attribute Impact Analysis – Reject text message stored in message attribute RejTxt.

7.26 Version 2.12.0 – April 2024

Capability	Component	HD/Case	RPM	Issue	Type	Description
	Eurex ETD 2.12.0		APL-8519	EUREXETD-200	Enh	Issue – Technical – Remove dependency of ClearConnect from EurexETD. Impact Analysis – EurexETD is run in independent thread.

7.27 Version 2.13.0 – May 2024

Capability	Component	Case	APL	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 2.13.0	00106953	APL-9780	EUREXETD-210	Enh	Issue – Generate RTN number at trade level for EMIR reporting requirement. Impact Analysis – RTN trade keyword is set as: <trade date> + <ContractSymbol trade keyword> + <ClOrdID2 trade keyword> +

Capability	Component	Case	APL	Issue	Type	Description
						<TradeTypeCode trade keyword>. The trade date comes from the TrdDt field, the ContractSymbol trade keyword comes from the Sym field, the ClOrdID2 trade keyword comes from the ClOrdID2 field, the TradeTypeCode trade keyword comes from the TrdTyp field.

7.28 Version 2.14.0 – July 2024

Important notes – Templates updates – Data model changes.

Capability	Component	Case	APL	Issue	Type	Description
	Eurex ETD 2.14.0			EUREXETD-219	Enh	Issue – Update TransferType value in templates. Impact Analysis – Updated AUTO_GIVEUP.xml and MANUAL_GIVEUP.xml.
	Eurex ETD 2.14.0			EUREXETD-217	Enh	Issue - Clear Connect - Request Message field "snt" date and time should be based on Exchange timezone. Impact Analysis – The "snt" date is now the current date time. You can specify the format using the following mapping: Name = EurexETD/CLEAR_CONNECT_PROPERTIES Interface Value = REQUEST_DATE_FORMAT Calypso Value = <format> Example: Calypso Value = yyyy-MM-dd'T'HH:mm:ss.SSS Change the templates to add Snt="{EXCHANGE_TIME}".
	Eurex ETD 2.14.0			EUREXETD-230	Enh	Issue – Add missing mapping and data for trade status and trade keywords. Impact Analysis – Added missing data and mapping entries. Changes to data model.

7.29 Version 2.14.1 – August 2024

Capability	Component	Case	APL	Issue	Type	Description
Integration Trades Data Integration Listed Derivatives	Eurex ETD 2.14.1	00120291		EUREXETD- 247	Issue	Issue – Outgoing Feed Server errors. Impact Analysis – Local impact – Improved logging info for troubleshooting connectivity issue.
Integration Trades Data Integration Listed Derivatives	Eurex ETD 2.14.1	00108868, 00126102		EUREXETD- 248	Issue	Issue – Create an exception task for connection issues. Impact Analysis – Local impact to UploaderConnectionExceptionHandler – Creating exception tasks for “Could not refresh” issues.

7.30 Version 2.15.0 – August 2024

Capability	Component	Case	APL	Issue	Type	Description
Integration Trades Data Integration Listed Derivatives	Eurex ETD 2.15.0	00120291		EUREXETD-246	Issue	Issue – Outgoing Feed Server errors. Impact Analysis – Local impact – Improved logging info for troubleshooting connectivity issue.

7.31 Version 2.16.0 – September 2024

Important Note - The LookupMessageAttribute "RptID" is used in place of uploadObjectExternalRef to look up an existing trade.

Capability	Component	Case	APL	Issue	Type	Description
Integration Trades Data Integration Listed Derivatives	Eurex ETD 2.16.0	00108868, 00126102		EUREXETD- 237	Issue	Issue – Create an exception task for connection issues. Impact Analysis – Local impact to UploaderConnectionExceptionHandler – Creating exception tasks for “Could not refresh” issues.
Integration Trades Data Integration	Eurex ETD 2.16.0	00124657		EUREXETD- 256	Enh	Issue - ClearConnect - Support for configurable lookup to fetch message. Impact Analysis - Added LookupMessageAttributeValue column to

Capability	Component	Case	APL	Issue	Type	Description
Listed Derivatives						identify the source trade field through which the actual trade will be amended. The LookupMessageAttribute "RptID" is used in place of uploadObjectExternalRef to look up an existing trade. The LookupMessageAttributeValue column has been added and is set to RptRefID - The value of the "RptRefID" field in the incoming message is utilized to find the existing transaction with the "RptID" field's value mapping from the LookupMessageAttribute. Please refer to the Calypso ClearConnect Integration Guide for details.

7.32 Version 2.17.0 – October 2024

Capability	Component	Case	APL	Issue	Type	Description
	Eurex ETD 2.17.0		APL-11480	EUREXETD-266	Sec	Issue – Security – The following libraries have been upgraded: io.netty:netty-codec-http to version 4.1.112.Final org.springframework:spring-* to version 5.3.39

7.33 Version 2.18.0 – January 2025

Capability	Component	Case	APL	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 2.18.0	00136403	APL-12295	EUREXETD-270	Enh	Issue – Enrich UTI reporting keywords in Message and Trade attributes. Impact Analysis – The following trade keywords and message attributes have been added: UTI-ETDCpty/TradeId = <UTIPrefix> + <UTIValue> UTIPrefix = 529900LN3S50JPU47S06 (hard-coded) UTIValue = For Trade report: T + <RptId> + <C for clearing or T otherwise>

Capability	Component	Case	APL	Issue	Type	Description
						For Position report: P + <PosID> + <C for clearing or T otherwise>

7.34 Version 3.5.0 – March 2024

Capability	Component	HD/Case	APL	Issue	Type	Description
	Eurex ETD 3.5.0		APL-7477	EUREXETD-201	Enh	Issue – Technical - Remove dependency of ClearConnect from EurexETD. Impact Analysis - EurexETD is run in independent thread.

7.35 Version 3.6.0 – May 2024

Capability	Component	Case	APL	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 3.6.0	00106953	APL-9779	EUREXETD-209	Enh	Issue – Generate RTN number at trade level for EMIR reporting requirement. Impact Analysis – RTN trade keyword is set as: <trade date> + <ContractSymbol trade keyword> + <ClOrdID2 trade keyword> + <TradeTypeCode trade keyword>. The trade date comes from the TrdDt field, the ContractSymbol trade keyword comes from the Sym field, the ClOrdID2 trade keyword comes from the ClOrdID2 field, the TradeTypeCode trade keyword comes from the TrdTyp field.
	Eurex ETD 3.6.0		APL-8442	EUREXETD-215	Sec	Issue – Security – The third party camel library has been upgraded to version 4.2.0.

7.36 Version 3.7.0 – July 2024

Important notes – Templates updates – Data model changes.

Capability	Component	Case	APL	Issue	Type	Description
	Eurex ETD 3.7.0			EUREXETD-218	Enh	Issue – Update TransferType value in templates. Impact Analysis – Updated AUTO_GIVEUP.xml and MANUAL_GIVEUP.xml.
	Eurex ETD 3.7.0		APL-9838	EUREXETD-207	Sec	Issue – Security – Upgrade spring.springframework:spring library to version 6.1.6.
	Eurex ETD 3.7.0			EUREXETD-216	Enh	Issue - Clear Connect - Request Message field "snt" date and time should be based on Exchange timezone. Impact Analysis – The "snt" date is now the current date time. You can specify the format using the following mapping: Name = EurexETD/CLEAR_CONNECT_PROPERTIES Interface Value = REQUEST_DATE_FORMAT Calypso Value = <format> Example: Calypso Value = yyyy-MM-dd'THH:mm:ss.SSS Change the templates to add Snt="{EXCHANGE_TIME}".
	Eurex ETD 3.7.0			EUREXETD-229	Enh	Issue – Add missing mapping and data for trade status and trade keywords. Impact Analysis – Added missing data and mapping entries. Changes to data model.

7.37 Version 3.8.0 – September 2024

Important Note - The LookupMessageAttribute "RptID" is used in place of uploadObjectExternalRef to look up an existing trade.

Capability	Component	Case	APL	Issue	Type	Description
Integration	Eurex ETD 3.8.0	00108868, 00126102		EUREXETD-236	Issue	Issue – Create an exception task for connection issues. Impact Analysis – Local impact to UploaderConnectionExceptionHandler –

Capability	Component	Case	APL	Issue	Type	Description
Trades Data Integration Listed Derivatives						Creating exception tasks for "Could not refresh" issues.
Integration Trades Data Integration Listed Derivatives	Eurex ETD 3.8.0	00124657		EUREXETD- 255	Enh	Issue - ClearConnect - Support for configurable lookup to fetch message. Impact Analysis - Added LookupMessageAttributeValue column to identify the source trade field through which the actual trade will be amended. The LookupMessageAttribute "RptID" is used in place of uploadObjectExternalRef to look up an existing trade. The LookupMessageAttributeValue column has been added and is set to RptRefID - The value of the "RptRefID" field in the incoming message is utilized to find the existing transaction with the "RptID" field's value mapping from the LookupMessageAttribute. Please refer to the Calypso ClearConnect Integration Guide for details.
Integration Trades Data Integration Listed Derivatives	Eurex ETD 3.8.0	00120291, 00123999		EUREXETD- 245	Issue	Issue – Outgoing Feed Server errors. Impact Analysis – Local impact – Improved logging info for troubleshooting connectivity issue.

7.38 Version 3.9.0 – October 2024

Capability	Component	Case	APL	Issue	Type	Description
	Eurex ETD 3.9.0		APL- 11372	EUREXETD- 267	Sec	Issue – Security – The following libraries have been upgraded: org.springframework:spring-* to version 6.1.11 camel to version 4.7.0 reactor-netty* to version 1.1.21

7.39 Version 3.10.0 – January 2025

Capability	Component	Case	APL	Issue	Type	Description
ETD EU /or FCM Clearing None Cross	Eurex ETD 3.10.0	00136403	APL- 10885	EUREXETD- 269	Enh	Issue – Enrich UTI reporting keywords in Message and Trade attributes. Impact Analysis – The following trade keywords and message attributes have been added: UTI-ETDCpty/TradeId = <UTIPrefix> + <UTIValue> UTIPrefix = 529900LN3S50JPU47S06 (hard-coded) UTIValue = For Trade report: T + <RptId> + <C for clearing or T otherwise> For Position report: P + <PosId> + <C for clearing or T otherwise>

7.40 Version 3.11.0 – March 2025

Capability	Component	Case	APL	Issue	Type	Description
	Eurex ETD 3.11.0			EUREXETD- 288	Sec	Issue – Security – Upgrade io.netty:netty-* library to version 4.1.115.Final.
	Eurex ETD 3.11.0		APL- 13231	EUREXETD- 287	Enh	Issue – Integration of ClearConnect bean. Impact Analysis - EurexETD module populates the ClearConnect bean and invokes the REST API to create ClearConnect messages. Please refer to the Calypso ClearConnect Integration Guide for details.