



Nasdaq Calypso

HSBC Interface

Version 5.0.3

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Approved

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Document History

Revision	Published	Summary of Changes
1.0	Jun 2015	New Document
2.0	Jul 2015	Release Notes 2.12.0
3.0	Aug 2015	Added section 2.2.2, edited section 2.2.3 and Release Notes 2.13.0
4.0	Aug 2015	Release Notes for 2.13.2
5.0	Aug 2015	Release Notes for 2.14.0
6.0	October 2021	Release Notes are now provided in the PBFA Module Release Notes, and Core Calypso Monthly Release Notes.
7.0	February 2022	Updated for version 5.0.0, 5.0.1, 5.0.2, 5.0.3 - - Technical release only – Version 17.0 compatibility

This document describes the interface between HSBC and Calypso.

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Introduction

The Calypso HSBC Interface runs as a Scheduled Task in Calypso. This is typically configured to run as an End of Day (EOD) process. The interface uses the HSBC CSV specification and transfers files to HSBC using FTP.

Only the activity for the day is sent to HSBC, excluding any intra-day activity which can be eliminated. For e.g., multiple amends during a day are sent as a single amend to HSBC.

The following sections in this document will help the users to configure HSBC & trades will be reported in the manner as specified by the client.

Interface Design

2.1 Scope

Products supported by the interface include the following:

- Bond
- Equity
- Repo

2.2 Functional Analysis

The new exchange functionality consists of just one scheduled task (INTERFACE_FEED), which exports trade data to HSBC.

2.2.1 Assumptions

- User has the valid credentials to update data to HSBC. This information must be provided in the appropriate fields in the scheduled task configuration.
- All data uploaded to HSBC is in CSV format.
- All communication with HSBC is done over FTP.
- User has datauploader - jar in CLASSPATH. This should already be present in the package delivered. Note that if Uploader is used for some other purpose (other than HSBC), it needs to be licensed separately.

List of jars required in the CLASSPATH:

- cal-upload.jar
- datauploader-xxx.jar
- edtftpj-pro-xxx.jar
- sjsxp-xxx.jar
- pbfa-xxx.jar

2.2.2 Amendments

Trade amendments are reported as two rows in the HSBC interface. One row cancels the old trade, with all details of the trade as they were when it was cancelled and the other row effectively creating a new trade with the latest trade details (post-amendment).

However, not all changes to a trade are considered as an amendment in the context of this interface. Only changes to one (or more) of the following fields of a trade are considered to be amendments.

- Trade Date
- Settlement Date

- Nominal
- Currency
- Principal
- Counterparty / SDIs

2.2.3 Configuration

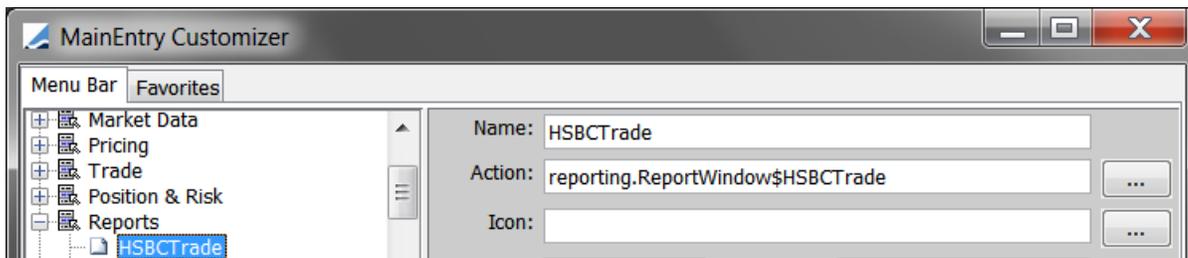
All the domain values and mapping types are inserted in the database by running Execute SQL.

After these pre-requisites are available, you can proceed with Calypso Configuration. This typically involves:

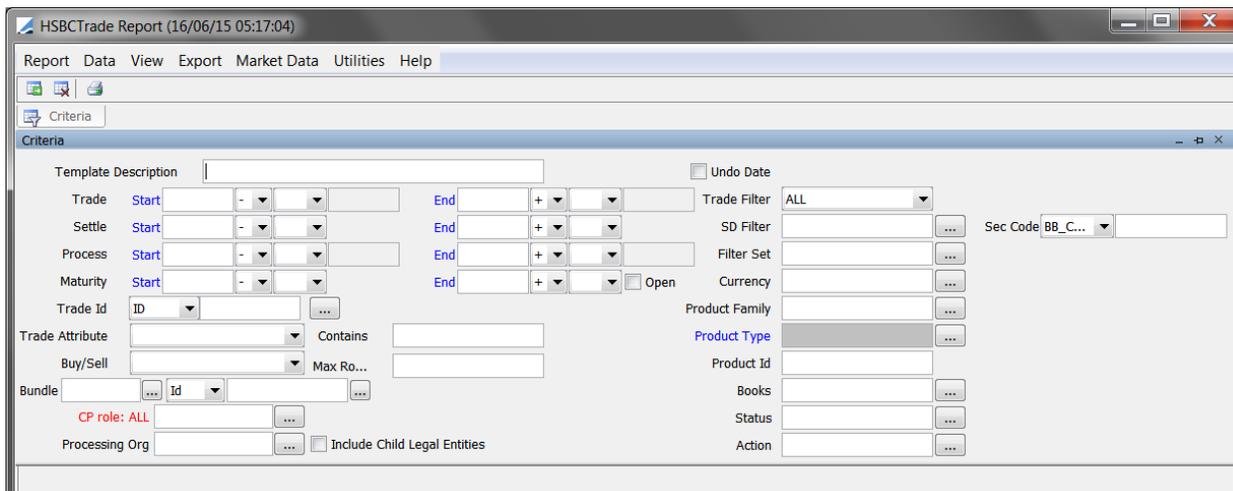
- Calypso Diary Engine:
 - The Calypso Diary Engine needs to be setup and running as part of the Engine server.
 - Also, the Calypso scheduler should be running for the execution of Scheduled Tasks.
 - Reports need to be configured with appropriate templates (supplied as part of Calypso HSBC interface).
- Setting the environment property "SET_XFER_ENTEREDDATE" to "true".

2.2.4 Import Report Template

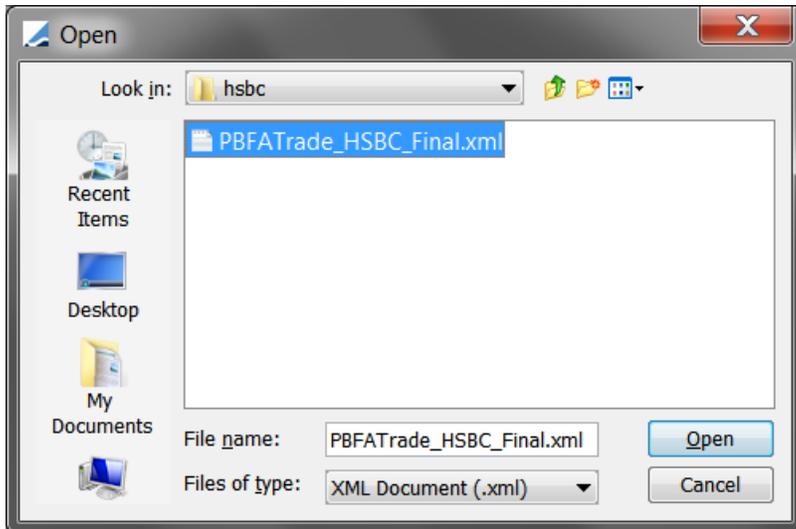
Configure Report Window from the Main Entry Configurator as follows.



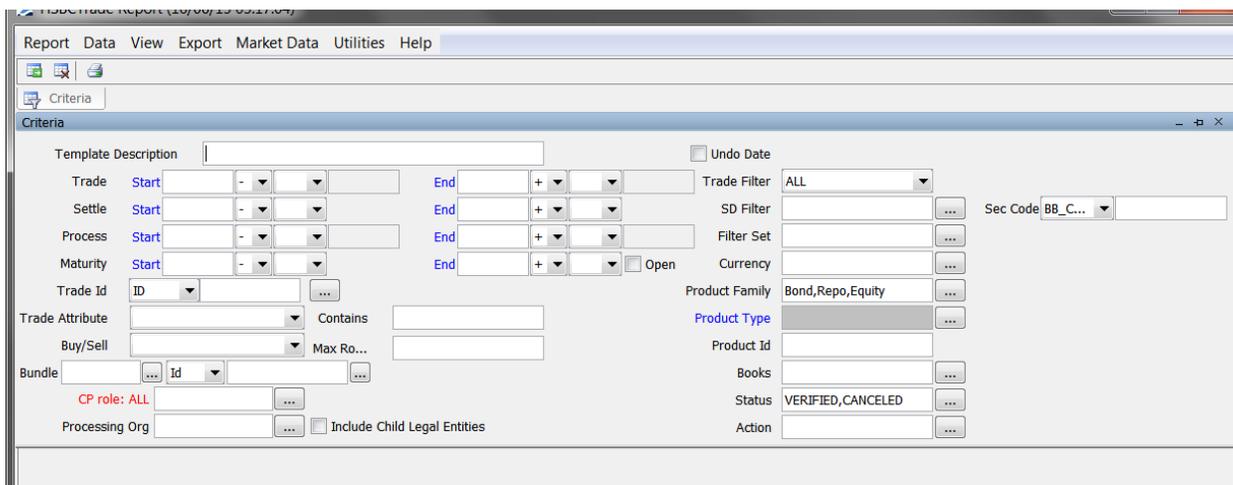
Launch the Report window.



Choose **Utilities > Import Template** and select the template file located at “resources/calypso/mapping/HSBC/PBFATrade_HSBC_Final.xml”.



Template imported.



2.2.5 Exporting - Scheduled Task (INTERFACE_FEED)

- This Scheduled task uploads the Trade Report Data to HSBC.
- This task will be used with a trade filter to filter the trades that will be sent.
- Trades can also be filtered by passing dates as described below.
- If using scheduled task, create the trade filter first and then use it from the Scheduled Task Window and save that task.

The scheduled task will use the following attributes to describe where and how the xml file will be sent.

Attribute	Description
Interface Name	Always "HSBC"
Instance	A human-readable name to uniquely identify the task. This is particularly useful when you have multiple scheduled tasks to configure.
Output Folder	C:\Test (To generate Temp Files to Send to HSBC)
Output File Name	Set the prefix for the output file name. Usually "hsbc_feed_".
Report Type	Always "HSBCTrade"
Template Name	Name of the Template
Start Date	-> Start Date -> Empty when Using Trade Filter (or) for trades created today.
End Date	End Date -> Empty when Using Trade Filter (or) for trades created today.
TransportType	FTP
HostName	Host Name
UserName	Login Name
Password	Login Password
Destination	Destination url
Load Type	<Leave Blank>
Proxy Type	DIRECT

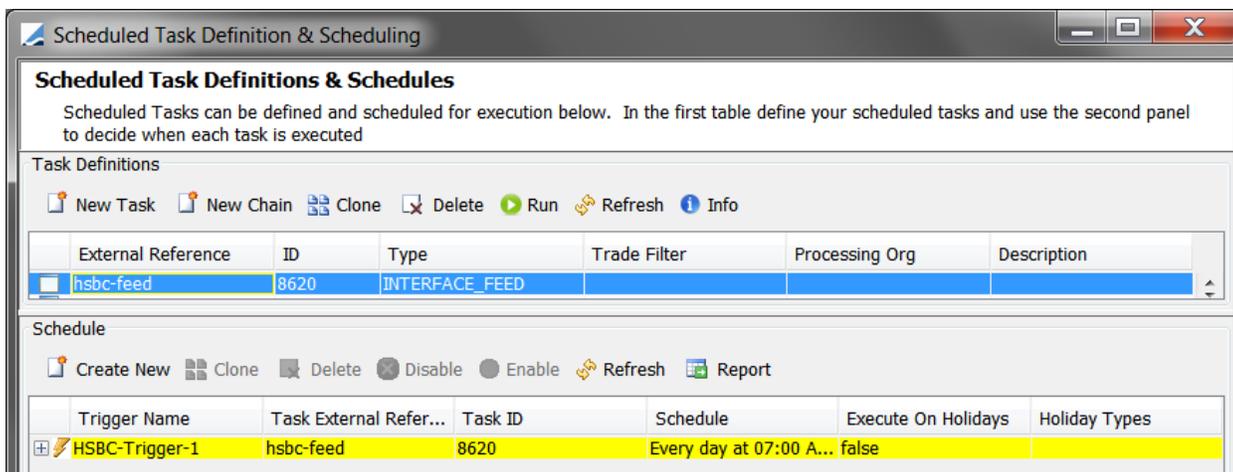
Output File Name

The transformed files will be saved in the output directory specified in the scheduled task attribute "Output Folder" having the file name prefix specified in the scheduled task attribute "Output File Name".

Output Folder	C:\hsbc-output
Output File Name	hsbc_feed_
Report Type	HSBCTrade

The resultant file name will have the "<prefix_specified><timestamp>.xml". For example, with the above configuration, one of the files generated would look like "hsbc_feed_20150123064759.xml".

Below screenshot shows the scheduled task window showing the INTERFACE_FEED scheduled task.



Scheduled Task Definition & Scheduling

Scheduled Tasks can be defined and scheduled for execution below. In the first table define your scheduled tasks and use the second panel to decide when each task is executed

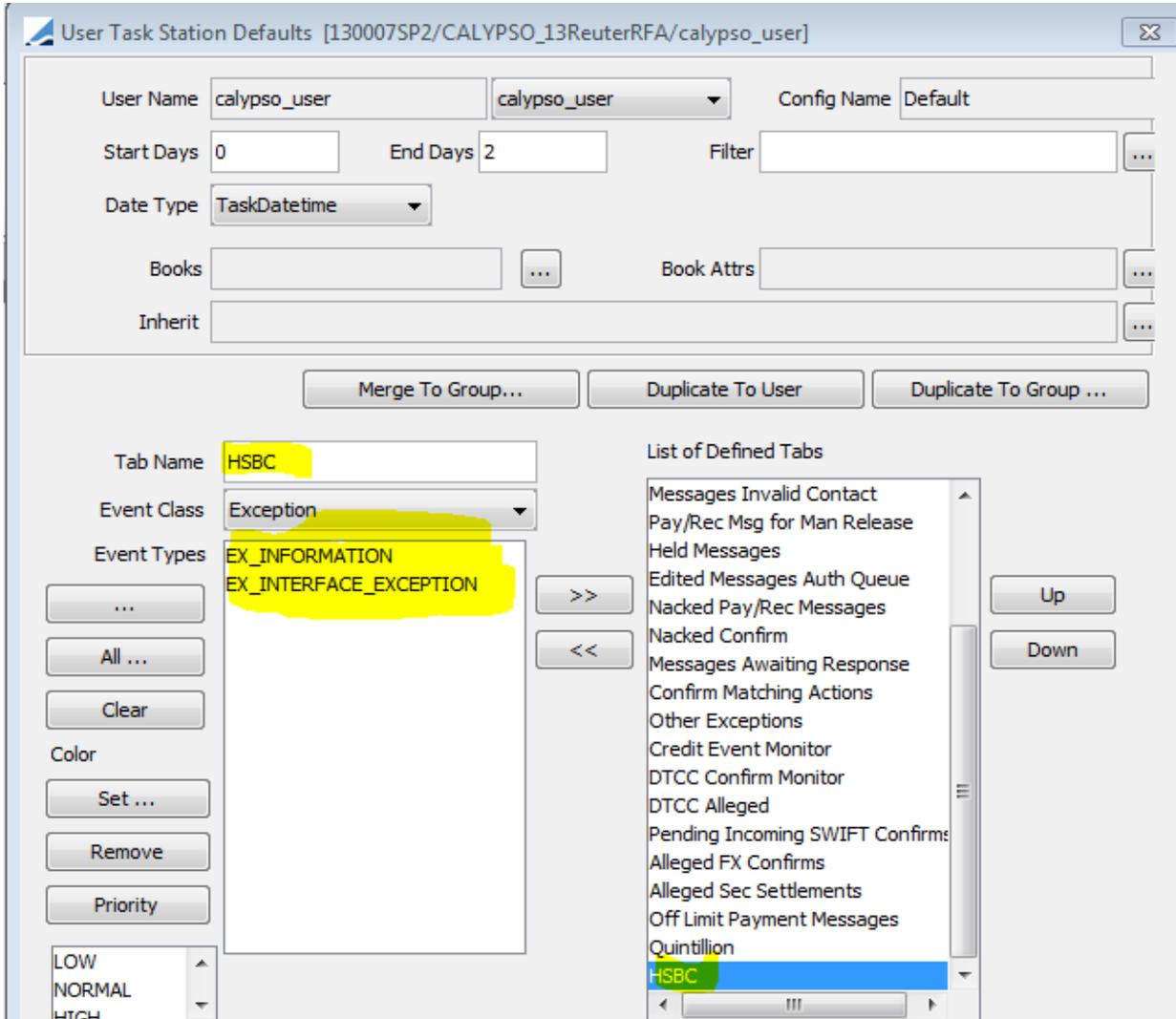
Task Definitions

External Reference	ID	Type	Trade Filter	Processing Org	Description
hsbc-feed	8620	INTERFACE_FEED			

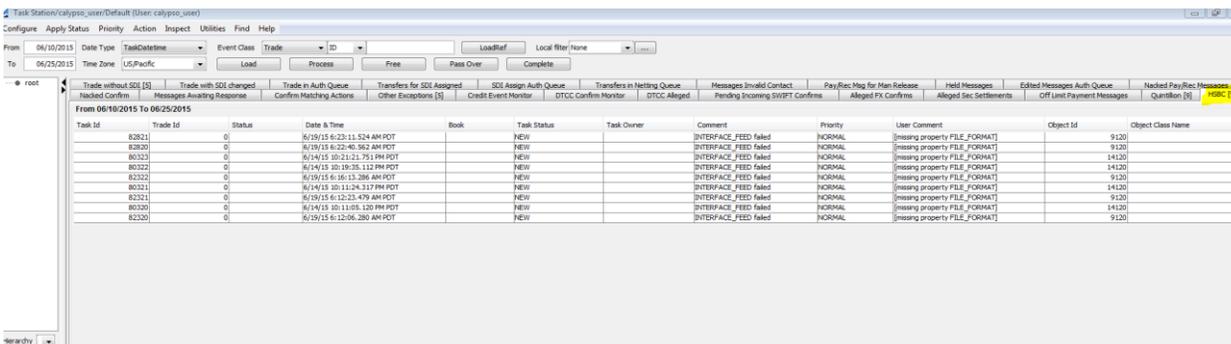
Schedule

Trigger Name	Task External Refer...	Task ID	Schedule	Execute On Holidays	Holiday Types
HSBC-Trigger-1	hsbc-feed	8620	Every day at 07:00 A...	false	

Any errors during execution of the INTERFACE_FEED scheduled task can be viewed from the task station. The task station displays all the validation errors that occurred while sending the trades to HSBC.



The below is the screenshot of task station displaying the errors:



2.3 Configure HSBC Interface Properties File

Please configure interface.properties (available under resources directory). The sample file supplied should already be preconfigured for HSBC, but you may need to copy the configuration if you already have a setup for some other interface

Note that you can leave the ENCRYPTION parameters blank if you want to test without encryption.

Also note that the text in bold **HSBC** has to match the "Interface Name" attribute in the Scheduled Task setup (section 2.2.4 above).

```
HSBC_ENCRYPTION_TYPE=  
HSBC_ENCRYPTION_KEY=  
HSBC_MERGE=true  
HSBC_FILE_FORMAT=CSV  
HSBC_XSLTS=HSBC_MT540_MT542.xslt  
HSBC_DATE_FORMAT=DATE,yyyyMMDD,None,-  
HSBC_SEND_EMPTY_FILES=
```