

Origo Integration Hub

Bulk Services Onboarding Guide (SS)

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CHANGE HISTORY

Date	Version	Changes Incorporated
27 th April 2021	1.0	Original Version. This guide combines material relevant to SSs from the three guides below:
		 OIH Bulk Valuations Implementation Guide v1.6; OIH Bulk Transaction History Implementation Guide v1.3; OIH Remuneration Implementation Guide v1.0.
14 th May 2021	1.1	Various minor corrections.
21 st June 2021	1.2	Added BV 'consistency check'. Added Cancelled_Marker to BTH <tpsdata>.</tpsdata>
26 th July 2021	1.3	Changed Document Classification to Public

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INTRODUCTION

Origo has built an Integration Hub (OIH) to satisfy the demand that exists for a more cost-efficient integration route between Adviser Software Suppliers (SSs) and Platform / Product Providers (PPs), and to allow SSs and PPs to achieve greater integration coverage across a wide range of business processes: Single Valuations, Bulk Valuations, Bulk Transaction History, Remuneration, Account Opening and Transfer Tracking.

Origo has implemented OIH Bulk Services for Hosted SSs. A solution for Installed SSs, which would enable Adviser Firms to securely access segregated areas on the OIH Data Server, may be developed, subject to demand and commercial agreement.

DOCUMENT PURPOSE

The purpose of this document is to provide technical SS personnel with a guide to what is required to onboard for any of the OIH Bulk Services:

- Bulk Valuations;
- Bulk Transaction History;
- Remuneration.

Note: OIH Remuneration currently processes PP files in csv or xml format - EDI Remuneration file processing is not yet part of our offering.

ASSOCIATED DOCUMENTS AND STANDARDS

The documents in the table below are sent to all prospective customers and familiarity with them is a pre-requisite for using OIH Bulk Services.

Document / Standard Name	Description			
Documents				
OIH – Service Description	A non-technical overview of OIH functionality.			
OIH – Solution Architecture	An overview of the OIH solution architecture including template responses to anticipated due diligence questions.			
OIH – Service Management Procedures	Defines OIH management and support processes and procedures.			
Standards (see Criterion's Standards Library)				
Standard Artefacts	Criterion artefacts (Message Implementation Guides, Data Patterns etc.) can be accessed and downloaded from https://www.criterion.org.uk/ .			
	The relevant Standards are: 'Contract Enquiry Bulk Valuations', 'Contract Enquiry Bulk Transaction History' and 'Remuneration Statement (XML)'.			

GLOSSARY

The following terms are used throughout this document.

Abbreviation / Term	Meaning
BOS	Back Office System
BV+/BTH+	Enriched CE BV/BTH files that use <tpsdata></tpsdata> extensions in a schema compliant way.
CE BV	Contract Enquiry Bulk Valuations
CE BTH	Contract Enquiry Bulk Transaction History
Consistency Check	OIH validation to ensure that a bulk file is internally consistent.
FRN	FCA Reference Number
'Hosted' SS	Adviser Software Supplier offering a centralised 'managed' service
'Installed' SS	Adviser Software Supplier offering distributed software that runs in separate instances on Adviser Firms' own infrastructure.
OIH	Origo Integration Hub
PP	Platform / Provider
Platform / Provider	Investment Platform and/or Life & Pensions Provider.
SS	Adviser Software Supplier
TPS	Trading Partner Specific

BULK SERVICES OVERVIEW

The OIH enables PPs and SSs to integrate across the following Bulk Services:

- Bulk Valuations;
- Bulk Transaction History;
- Remuneration.

OPERATIONAL CONTEXT

Bulk Files:

- contain data for a single Adviser Firm or Network;
- are available for collection by 07:00 (GMT/BST);
- cannot be created more frequently than daily.

Contract Selection

- To partner with an SS, PPs must know who that SS's Adviser Firm customers are.

 Note: PPs usually require Adviser Firms to register with them for Bulk downloads.
- PPs only include contracts where the Adviser Firm is the Servicing Agent.
 Note: Most PPs require the Servicing Agent to be an FCA regulated Financial Adviser.

Access

SSs must use an Organisational Unipass certificate to access the OIH SFTP Server (see the <u>Access Credentials</u> section for details).

FUNCTIONAL OVERVIEW

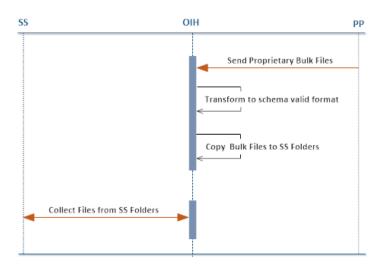
- 1. PPs can send **csv** or **xml** files via SFTP.
- 2. Each file contains data for a single Adviser Firm¹.
- 3. PPs create no more than one file a day for each Adviser Firm, policy range and Service (e.g. BV).
 - a) PPs may create multiple BV or BTH files each day for an Adviser Firm but these files will cover distinct policy ranges (e.g. administered on different systems).
- 4. PPs have the choice of:
 - a) sending bulk files to the OIH;
 - b) allowing OIH to retrieve them from their own infrastructure.
- 5. OIH processes PP Bulk files which are:
 - a) BV/BTH/REM Standard compliant;
 - b) Proprietary (i.e., free format).
- 6. OIH ensures that PP Bulk xml and csv files are:
 - a) xml schema valid; OR
 - b) can be transformed to be schema valid.
- 7. OIH uses the data extension points of the CE BV and BTH Standards to add **additional data** to its output files as available from PPs and as requested by SSs.
- 8. SSs can collect the following files via SFTP:
 - a) **BV** csv or xml;
 - b) BTH csv or xml;
 - c) Remuneration xml only;

OR

- 9. SSs can expose an API for the OIH to update their data directly.
- 10. OIH applies a standard naming convention to the bulk files it moves into SS folders.

Example: PP sends proprietary Bulk Files

- PP sends bulk files in non-standard format to PP's own folder.
 (max 1 file/day/process)
- 2. OIH transforms to standard (schema valid) format
- 3. OIH copies transformed files to SS folder and renames them.
- 4. SS collects files over SFTP (files available after 7am).



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¹ Throughout this document, Adviser Firm should be taken to mean 'Adviser Firm or Network'.

ACCESSING BULK FILES ON OIH

The OIH stores files on its SFTP server for SS collection. The SS connects to the OIH using their organisational Unipass certificate and collects the files.

SFTP FILES

Bulk files are named using the following convention:

[FRN]_[YYYYMMDD]_[Provider]_[ProviderID]_[Process].[ext]

FRN	The FRN of the Adviser Firm or Network.
	Note : Aegon Retail are not able to provide the Adviser Firm FRN.
YYYYMMDD	The creation date of the bulk file in the OIH.
Provider	The provider / platform name.
ProviderID	The PP's Adviser Firm identifier e.g. Aegon ARC ConnectID, Aviva NetworkID. Note: Some ProviderIDs may map to the same FRN i.e. PPs may create multiple files with the same FRN, creation date, provider and process.
Process	The business process: • BV: Bulk Valuations • BTH: Bulk Transaction History • REM: Remuneration
ext	The file extension, based on the SS choice of file format, i.e., xml or csv . Note : Remuneration is only available in xml format

SSs are given access to a folder on the OIH SFTP server.

By default, no sub-folders are provided. The SS can however opt to choose one of the sub-folder structures below:

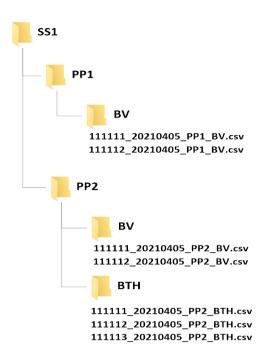
- 1. Process Type (e.g., SS1 > BV);
- 2. PP (e.g., SS1 > AegonARC);
- 3. PP/Process Type (e.g., SS1 > AegonARC > BV);
- 4. Process Type/ PP (e.g., SS1 > BV > AegonARC).

SSs are given **read** and **delete** access to their folders/subfolders.

Example configuration – PP/Process Type sub-folders

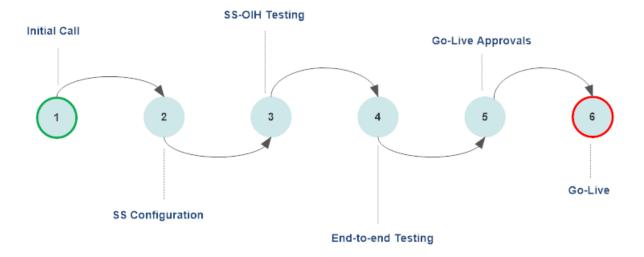
Hosted SS, **SS1** is configured to receive csv files for **BV** and **BTH** and has trading partnerships with **PP1** and **PP2**.

- **PP1** with Id 10000PP1 provides **BV** files for Adviser Firms **111111** and **111112**.
- PP2 with Id 10000PP2 provides BV files for Adviser Firms 111111 and 111112 and BTH files for Adviser Firms 111111, 111112 and 111113



CUSTOMER ONBOARDING

The Bulk Service onboarding journey can be broken down into following steps:



INITIAL CALL

An initial conference call is scheduled where an Origo analyst:

- provides an overview of the OIH;
- describes the steps involved in onboarding to the OIH;
- captures SS requirements;
- explains the SS's and Origo's responsibilities throughout the onboarding process.

The following requirements are captured:

- **Bulk Services:** which bulk services are required?
- Trading Partners: which specific PPs would SSs like to receive bulk files from?
- Business Model: how can OIH can meet any specific requirements of the SS business model?

SS CONFIGURATION

Following the initial call:

- The SS notifies Origo of their required:
 - o choice of connectivity (SFTP or API);
 - o sub-folder structure.
- The SS provides Origo with the public key of their Organisational Unipass certificate (required for SFTP access).

Note: Most SSs opt to collect bulk files from the OIH SFTP server. Another option is for the SS to expose an API that the OIH can 'push' bulk data to. This integration would require bespoke development from Origo and so cannot be covered in this document.

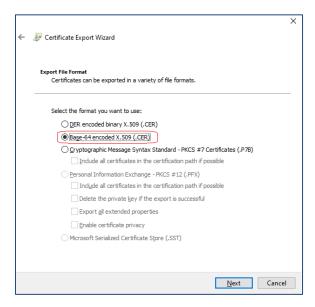
Origo:

- provides the SS with sample bulk files;
- sets up the SS on the **UAT Customer Portal**;
- creates the SS's folder on the SFTP server;
- provides the SS with credentials to access their folder(s).

ACCESS CREDENTIALS

The SS must provide Origo with the public key of their **Organisational Unipass certificate.** This should be in the form of a **Base64 export**.

Example: Exporting a certificate using the Windows Export Wizard



Note: For non-Windows systems, the certificate file will have a **.PEM** file extension (as opposed to **.CER** for Windows).

An **Organisational Unipass certificate** can be applied for here:

https://www.origoservices.net/UnipassOrganisationCertificateApplicationForm.html

For testing purposes, a **trial Organisational certificate** could be used. A trial certificate can **only** be used to connect to the test OIH test environment. This certificate can be applied for here

https://www.unipass.co.uk/Pages/TrialCertificate/Apply.aspx

On receipt of the **public key**, Origo provides the SS with a **username** and creates/provides access to the folders as required.

The SS will use their **private key** together with the following details to connect to the OIH SFTP server:

Host oih-sftp.origoservices.com

Port 22

Username As provided by Origo

Note: Separate usernames are provided for UAT and Live, however a live Unipass certificate may be used in UAT.

SS - OIH TESTING

'Two-way' testing between SS and OIH is carried out prior to 'end-to-end' testing to ensure that the SS can successfully:

- connect to the OIH SFTP server (see <u>Access Credentials</u>);
- process the data the OIH makes available.

END-TO-END TESTING

When SS-OIH and PP-OIH testing has completed end-to-end testing will ensure that:

- all process links from PP file creation to SS ingestion function together as expected;
- the SS is satisfied it can successfully process all BV files created by the PP.

Note: End-to-end testing is strongly recommended for the first integration. In some cases, this may not be possible as the PP may not have a test environment.

GO-LIVE APPROVALS

Origo requires email confirmation from the main business contacts of both trading partners before configuring the trading partnership on the OIH Live environment.

This approval is required to:

- 1. ensure that there are no reasons why the trading partnership should not be made LIVE on the OIH:
- 2. enable Origo to maintain an audit trail of trading partnership confirmations.

GO-LIVE

Following the receipt of both 'Go-Live Approvals', Origo arranges a date to:

- configure the SS in the Live environment;
- provide the SS with a username for the Live environment;
- add SS users to the **Live Customer Portal**: https://oih-portal.origoservices.com/.

ONBOARDING CHECKLIST

The table below contains a list of milestones that must be completed for an SS to successfully integrate with OIH Bulk Services.

Task	Who
Hold tele-conference to capture SS requirements.	SS, Origo
Identify trading partners.	SS, Origo
Obtain Organisational Unipass certificate.	SS
Provide Origo with public key from Unipass Organisational certificate.	SS
Provide Origo with choice of sub-folder configuration.	SS
Set up SS folders on UAT SFTP environment.	Origo
Provide SS with SFTP access for UAT.	Origo
Provide SS with sample files.	Origo
Obtain Individual Unipass certificate.	SS
Complete SS-OIH testing.	SS
Complete 'end-to-end' testing.	SS
Note : This task is not required but is recommended where possible.	
Agree and sign commercials and legal contract with Origo.	SS, Origo
Provide 'go-live' approvals.	SS, Origo, PP
Configure SS on OIH Live environment.	Origo

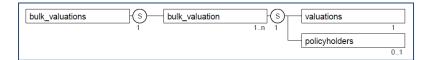
APPENDIX A – DATA STRUCTURES

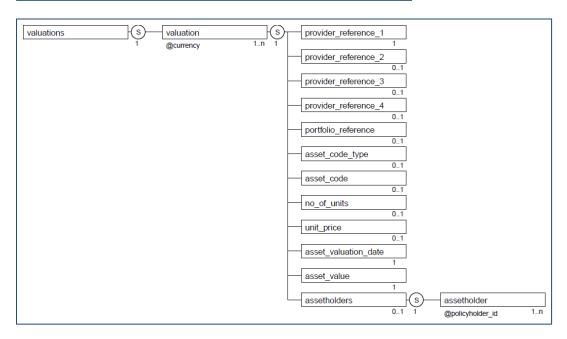
This section gives an overview of the structure of the xml and csv files that SSs collect from OIH. For further information please consult the **Criterion Standards Library**.

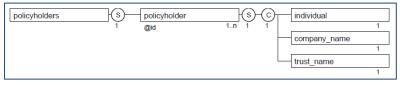
BULK VALUATIONS

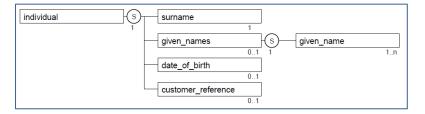
The diagrams below show the xml structure of the Criterion CE BV Standard. It can be seen that:

- a bulk valuations file consists of one or more bulk valuations;
- each bulk valuation consists of one or more valuations held by one or more policyholders.









The csv structure of the Criterion CE BV Standard is very similar to the xml structure, though there are some minor restrictions with respect to repeating elements.

OIH carries out one 'consistency check' to confirm that unit_price * no_of_units = asset_value.

BULK VALUATIONS +

The Origo BV Standard has been designed to be as light as possible and consequently doesn't cater for the use case where BV files contain clients, plans or assets which are not already present on an SS's system.

To date, most of the PPs that have contracted for OIH BV send pre-existing csv BV files to the OIH, and these files often contain data which could be used by SSs to address this use case by creating skeleton client or plan records and populating additional assets.

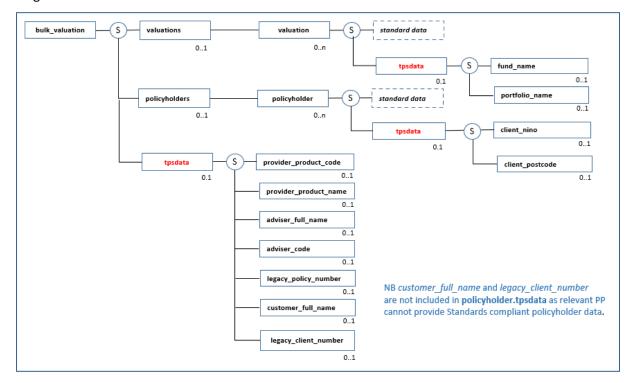
Origo has therefore added standardised TPS data blocks, in line with Criterion guidelines, to **all** Bulk Valuation files - xml or csv – to hold additional client, plan and asset data.

SSs can decide whether they wish to use **<tpsdata>** or not. To avoid SSs needing to implement PP specific logic, **<tpsdata>** is standardised across all PPs².

Only fields that hold a value will be present in the **<tpsdata>** block. Where all of the fields within a **<tpsdata>** block are empty, the block will be omitted.

BV + XML < TPSDATA >

As per the CE Bulk Valuations v1.0 schema, **<tpsdata>** data blocks have been added as shown in the diagram below.



² Rather than being Trading Partner Specific, these < tpsdata > blocks will actually be OIH specific.

Details of the elements to be included within <tpsdata> are shown below.

tpsdata elements	tpsdata path
client_nino	bulk_valuations.bulk_valuation.policyholders.policyholder.tpsdata.client_nino
client_postcode	bulk_valuations.bulk_valuation.policyholders.policyholder.tpsdata.client_postcode
fund_name	bulk_valuations.bulk_valuation.valuations.valuation.tpsdata.fund_name
portfolio_name	bulk_valuations.bulk_valuation.valuations.valuation.tpsdata.portfolio_name
provider_product_code	bulk_valuations.bulk_valuation.tpsdata.provider_product_code
provider_product_name	bulk_valuations.bulk_valuation.tpsdata.provider_product_name
adviser_full_name	bulk_valuations.bulk_valuation.tpsdata.adviser_full_name
adviser_code	bulk_valuations.bulk_valuation.tpsdata.adviser_code
legacy_policy_number	bulk_valuations.bulk_valuation.tpsdata.legacy_policy_number
customer_full_name	bulk_valuations.bulk_valuation.tpsdata.customer_full_name
legacy_client_number	bulk_valuations.bulk_valuation.tpsdata.legacy_client_number

BV + CSV <TPSDATA>

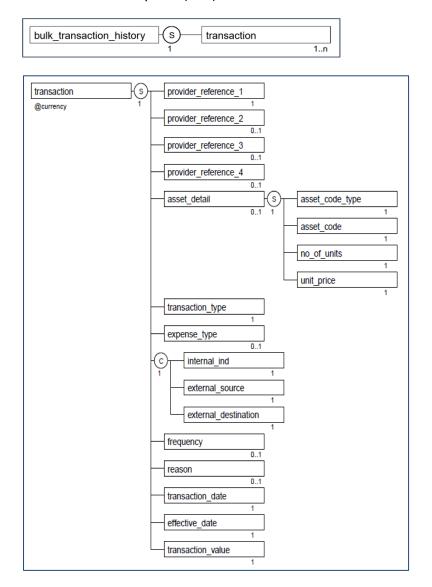
Unlike BV + xml files, all csv tpsdata columns are present regardless of whether they hold a value. The table below shows csv column names and each PP's tpsdata provision. *Note:* The PP provision shown below also applies to xml files.

	Aegon Retail	Aegon ARC	Aviva	Benchmark Capital (Fusion)	Prudential
tpsdata csv column					
ext_client_nino	✓	✓		✓	✓
ext_client_postcode	✓	✓	✓	✓	✓
ext_fund_name	✓	✓	√	✓	✓
ext_portfolio_name					
ext_provider_product_code	✓		✓	✓	✓
ext_provider_product_name	✓	✓	✓	✓	✓
ext_adviser_full_name			✓		
ext_adviser_code			✓		
ext_legacy_policy_number			✓		
ext_customer_full_name			✓		
ext_legacy_client_number			✓		

BULK TRANSACTION HISTORY

The diagrams below show the xml structure of the Criterion CE BV Standard. It can be seen that:

- a bulk transaction history file consists of one or more transactions;
- the data held against each transaction enables it to be mapped to contracts held on the SS's back office system (BOS).



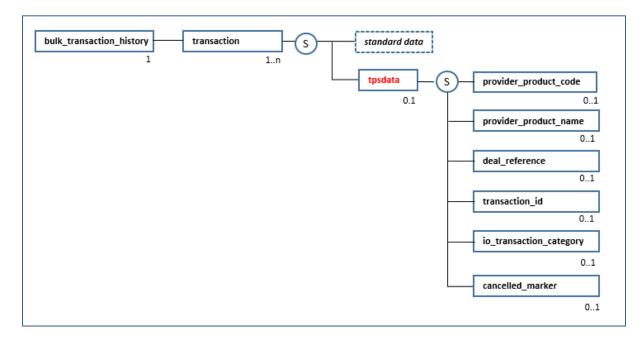
The original PP transaction description is written to <reason>.

BULK TRANSACTION HISTORY +

BTH + XML < TPSDATA >

The CE Bulk Transaction History Standard v1.0 excludes several data items which are present on several PP BTH files and which some SSs have told Origo are useful to them. OIH therefore includes a TPS data block for this additional data.

- The TPS block uses the extension point provided in the CE BTH schema.
- TPS (Trading Partner Specific) blocks are standard for all PPs, though specific data elements may not be available from all providers.
- TPS data is added to both csv and xml files.



Details of the elements to be included within <tpsdata> are shown below.

tpsdata elements	tpsdata path
provider_product_code	bulk_transaction_history.transaction.tpsdata.provider_product_code
provider_product_name	bulk_transaction_history.transaction.tpsdata.provider_product_name
deal_reference	bulk_transaction_history.transaction.tpsdata.deal_reference
transaction_id	bulk_transaction_history.transaction.tpsdata.transaction_id
io_transaction_category	bulk_transaction_history.transaction.tpsdata.io_transaction_category
cancelled_marker	bulk_transaction_history.transaction.tpsdata.cancelled_marker

BTH + CSV < TPSDATA >

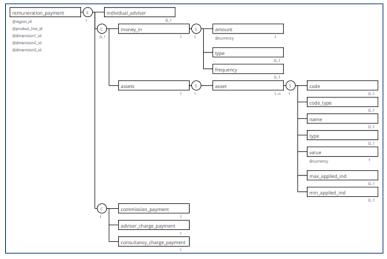
Unlike BTH + XML, all csv tpsdata columns are present regardless of whether they hold a value. The table below shows csv column names and each PP's tpsdata provision. *Note:* The PP provision shown below also applies to xml files.

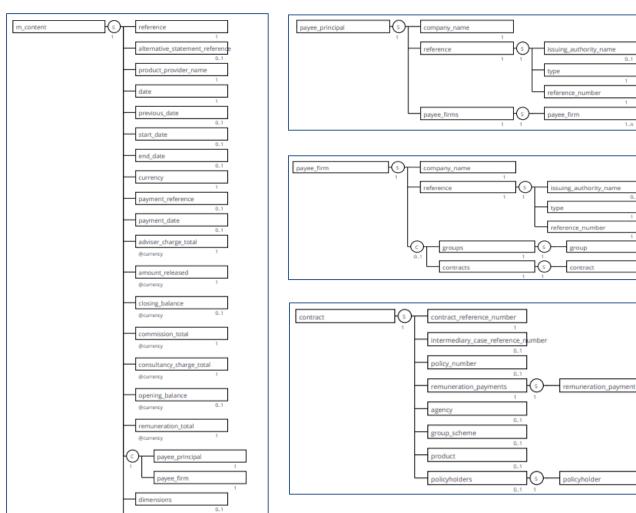
	Aegon Retail	Aegon ARC	Aviva
tpsdata csv column			
ext_provider_product_code	✓		
ext_provider_product_name	✓		
ext_deal_reference	✓	✓	
ext_transaction_id	✓	✓	✓
ext_io_transaction_category			✓
ext_cancelled_marker*		✓	

^{*} the **<cancelled_marker>** is infrequently set by Aegon ARC operations. It is applied to transactions sent within the last 7 days, and if populated, indicates the transaction has been cancelled and should be removed from the SSs BOS. (If an Aegon ARC transaction needs to be cancelled after 7 days have elapsed, Aegon will send a 'reversal' transaction.)

REMUNERATION

The Criterion Remuneration Statement (XML) Standard has a more complex structure than BV or BTH, though it doesn't include any **<tpsdata>** extension points. A detailed explanation of this standard can be found on the Criterion Standards web site, https://www.criterion.org.uk/.





dimension_totals