WATSON WHEATLEY

HEDGE FUND - DERIVATIVES RECONCILIATION

INTRODUCTION

A London based hedge fund specialising in European equity began trading in 2008 and had grown their AUM to over £2bn by 2014. A three man operations team were utilising a well-known portfolio accounting system (PMS) and had developed a series of Excel spreadsheets for validating market value and P&L data as well as conducting positions and cash balance reconciliation with the prime brokers.
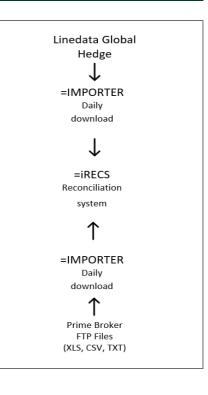
REQUIREMENT

Reconciliation was recognised as a weakness in the firm's operational processes. The manual effort required was disproportionate to the quality of the reconciliation obtained. The Excel approach failed to satisfy the operational due diligence commissioned by prospective investors. The solution was fragile and required significant maintenance as volumes increased or as new funds or prime broker relationships were added.

The business wished to achieve a much more granular reconciliation with tight controls whilst minimising manual effort. A scalable solution was sought which could enable the business to grow whilst keeping the operations function small. A best practice reconciliation model was needed to satisfy potential investors and ensure a consistent approach by all users and across all funds.

Whilst the PMS provided a rudimentary form of position and cash balance reconciliation it could not satisfy the need for transaction level reconciliation. It had become clear that a professional solution was required. The business was steered by the consulting arm of one of their prime brokers towards a few potential vendors, and after a demonstration and proof of concept, iRecs from Watson Wheatley was selected. Its strengths included an established interface with the PMS, the availability of import maps for the third party relationships, and critically, functionality to handle book cost and P&L differences arising from trading futures and equity swaps using its Total Equity module.

→ $2bn AUM Hedge Fund.

→ ETD & OTC Derivatives.

→ Linedata Global Hedge PMS.

→ Trades, Positions, Cash Balances, Total Equity Reconciliation.

Linedata Global Hedge
↓
=IMPORTER
Daily download

↓

=iRECS
Reconciliation system

↑

=IMPORTER
Daily download

↑

Prime Broker FTP Files
(XLS, CSV, TXT)

SOLUTION

iRecs was installed, configured and commissioned by Watson Wheatley's professional services team. It was apparent that the business needed the solution quickly but, due to pressure of day to day work, the operations team were unable to contribute significantly to the implementation process. This was not a problem. WWFS were familiar with the hedge fund's business, the instrument classes being traded, the prime brokers being used, and the PMS. The objective of the implementation was for WWFS to deliver the solution, for the hedge fund to user acceptance test and to roll immediately into production.

Following installation of the software with the hedge fund's outsourced IT firm the first task was to set up the delivery of static and daily reconciliation data from the PMS using the standard API. iRecs was populated with fund and prime broker details used by the firm, as well as currently held securities, their identifiers, instrument class structure and transaction types. By slaving data from the PMS this eliminated the static data set up requirements in iRecs and, through cross referencing security and contract ids, would facilitate uploaded corrections to the PMS from iRecs. By switching on the delivery of simple reconciliation data using the API, iRecs was fed each morning with the latest positions, trades, cash balances and all cash flows from the PMS. Prime broker and administrator data was aggregated and automated with the iRecs data manipulation tools using established templates where appropriate

As soon as the integrity of each prime broker data set was assured the automated daily delivery process was set up and the matching engine was turned on. iRecs was delivered with a set of matching rules that were tuned for the instrument classes being traded. The users are able to enhance these rules or add new ones as required, but the standard set delivered in excess of 90% match rates without modification. The PMS, Linedata Global Hedge was unable to calculate realised P&L from futures trading at the agent account level so cash balances passed to iRecs for matching were inaccurate. iRecs recalculated both the realised and unrealised P&L based on the received trade history, current positions and security prices to create the required margin balance to be used for reconciliation.

Watson Wheatley's Importer software was used to construct import maps to read the files containing the equivalent data from each clearer. The created maps were invoked automatically on receipt of the decrypted files and data was passed directly to the relevant iRecs tables.

All data received by iRecs was automatically validated for continuity of positions (based on underlying trades) and continuity of margin balances (based on underlying cash flows and calculated trade P&L).

iRecs was configured with standard match rules for total equity derivative reconciliation along with bespoke work flows to correctly identify, annotate and route key break items. Bespoke reporting was developed to assist the client, quantify the service quality provided by its clearers and to measure the volume and value of breaks by type and to help identify weak operational processes. The reports were delivered through the standard reporting engine delivered with iRecs.

Optimal operating procedures were drawn up with the section head and provided the basis for training users in all aspects of operation of the system.

The system was introduced to production and run alongside the client's manual process for 4 weeks to prove the system, give the users hands-on experience and to tune the match rules and work flows to maximise the automation. Cutover to live was simply a matter of decommissioning the manual process and relying fully on iRecs. Watson Wheatley provided both on-site and remote support to the users throughout for any issues that they encountered.

RESULTS

This project was initiated with the understanding that the client's operations resources available to the project would be limited. Whilst this is not desirable from an engagement and acceptance perspective it is often inevitable. Accepting the new system and turning off the legacy system requires to an extent a leap of faith, but this is based on confidence in the functionality and comfort that the numbers it is delivering are accurate.

This process was completed successfully by the client with assistance of WWFS over an elapsed time of 2/3 weeks.

BEST PRACTICE RECONCILIATION.

info@watsonwheatley.com | watsonwheatley.com

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BENEFITS

The client is now live and gaining considerable benefit from the system. Some 6000 transactions per month are being reconciled with automated match rates of 96% for trades and 94% for cash leaving approximately 10-15 breaks per day to be reviewed. Total Equity reconciliation enables the client to ignore realised P&L differences between the PMS and the prime broker, tie out the margin balances to the penny and therefore properly manage swap financing with the prime broker.

Critically the business now has access to a robust and flexible reconciliation framework delivering very granular and accurate matching of trades, cash and P&L. This is a great starting point and is now allowing the client to add other reconciliations covering prices, market values and dividend accruals and provides a solid underpinning of its cash management function.