Case Study

Global Inventory Management

Broadridge®

Case Study: Global Inventory Management - European Bank

4sight's (now part of Broadridge) customer is a European banking group and one of Europe's 20 largest banks by assets. In the securities financing markets the customer has trading operations globally with between 500 and 600 trades a day and over 1000 open positions.

Background to the Project

In 2014 the bank identified a need for a global inventory management solution as part of a wider project to replace its legacy repo solution. At the time it was using excel spreadsheets to manage its inventory and didn't have a clear real time view of positions across its trading activities and geographical locations.

This resulted in fragmented pools of inventory and collateral. In addition, the bank did not have an accurate, forward looking picture of which positions were pending vs settled. It had to invest significant manual effort to collate data from various systems into one place.

The bank also identified a growing need to move to a more effective liquidity management model, driven by the increased demands of meeting Basel III Liquidity Coverage requirements and growing costs around sourcing liquidity. The bank's existing system infrastructure, at that time, led to major inefficiencies and unnecessary costs in managing the bank's liquidity profile.

The bank therefore conducted a due diligence process by reviewing a wide range of vendor solutions available on the market and selected 4sight as its preferred supplier.

Key to the project award was the flexibility and ease of use of 4sight's inventory management offering. The customer was also impressed with the strength of 4sight's repo solution and its global client base in the fixed income markets.

The Project

As part of the implementation project, 4sight created feeds with 10 external systems used by the client. This allowed the customer to receive trade events from its Kondor + trading system that mapped directly into the 4sight inventory ladder in real time. 4sight also created static feeds with the client's golden source market and reference data solutions and interfaces with the client's liquidity and risk management systems amongst others.

These interfaces enabled the 4sight Inventory Manager to aggregate positions from multiple global desks and custodians into a single real time view showing both pending and settled positions up to 30 days into the future.

This allowed the customer to view inventory in a hierarchical desk and book structure with the flexibility to identify positions at any level of the hierarchy and remove certain desks and profit centres from inventory views when required.

The Inventory Manager also incorporated risk information such as credit limits and security level liquidity classes into its views.

Delta Window

4sight developed a delta window that is now widely used by the client. As well as the obvious advantage to showing the change per day and deltas from previous days when trades settle, this window also displays the holdings per ISIN for the full lifecycle of all repos held.

Basel III LCR

To support Basel III Liquidity Coverage Ratios (LCR), 4sight developed Bloomberg Liquidity Class Feeds in the system's instrument static to identify ISINs that fall into specific HQLA categories.

This allows the bank to store the LCR level against each security and display it in the Inventory Manager. In addition to LCR level, 4sight also developed Marketability and Liquidity Class columns in the Inventory Manager.

Implementation

Following the successful implementation project, the system went live in November 2015. 4sight learned a number of lessons in this project that will enable further streamlining of future projects.

This includes managing stakeholders and product owners, involved in many external systems that feed data into the 4sight solution, to allow effective global inventory management.

Modules Used

- Inventory Ladder
- Repo Module
- Gateway Interfacing Tool

Date	Instrument...	Traded Qty	Delta Diff	Settled Qty	Pending Qty
AT0000386115 (1 item)					
09/09/2016	AT0000386115	0	0	254,000	(254,000)
BE0000291972 (7 items)					
09/09/2016	BE0000291972	59,900,000	0	0	59,900,000
09/01/2017	BE0000291972	60,200,000	300,000		60,200,000
08/02/2017	BE0000291972	40,200,000	(20,000,000)		40,200,000
10/07/2017	BE0000291972	39,900,000	(300,000)		39,900,000
19/07/2017	BE0000291972	40,000,000	100,000		40,000,000
08/08/2017	BE0000291972	20,000,000	(20,000,000)		20,000,000
11/08/2017	BE0000291972	0	(20,000,000)		0
BE0000300096 (6 items)					
09/09/2016	BE0000300096	8,400,000	0	0	8,400,000
09/01/2017	BE0000300096	8,850,000	450,000		8,850,000
08/02/2017	BE0000300096	2,450,000	(6,400,000)		2,450,000
10/07/2017	BE0000300096	2,000,000	(450,000)		2,000,000
08/08/2017	BE0000300096	1,000,000	(1,000,000)		1,000,000
11/08/2017	BE0000300096	0	(1,000,000)		0
BE0000304130 (6 items)					
09/09/2016	BE0000304130	32,400,000	0	0	32,400,000

DELTA WINDOW
Shows the change per day and deltas from previous days when trades settle

Benefits

Since go live the client has experienced a significant reduction in manual effort and major time savings. One procedure involving a necessary daily reconciliation, specific to the client, previously took 2 man hours per day. Following rollout of the 4sight solution, the process subsequently took less than 10 minutes.

This reduction in manual effort helped the client to adapt to the new regulatory environment without increasing headcount to support time consuming manual processes.

The firm was also able to take a more proactive forward looking view of managing its liquidity, reducing liquidity risk and the cost of sourcing liquid assets to comply with rules such as the Basel III LCR.

Integration with the 4sight Repo solution enabled the client to finance its long HQLA positions more effectively while sourcing external inventory from the street for liquidity purposes with minimal cost where required.

Future Phases

Following the successful go live in Nov 2015, the next phase of the project is to roll out the aggregated market view tools 4sight is developing for multi-market trading with electronic repo markets such as MTS and Brokertec.

This will provide the client with a unified liquidity view with smart order logic to manage trading across markets more seamlessly.

Combined with the 4sight Inventory Manager it will enable the customer to process its long and short positions more efficiently, as well as identifying and unlocking value from its balance sheet more easily.

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