



it's about time

Kx Data Refinery

Use Case: MiFID II Platform Implementation

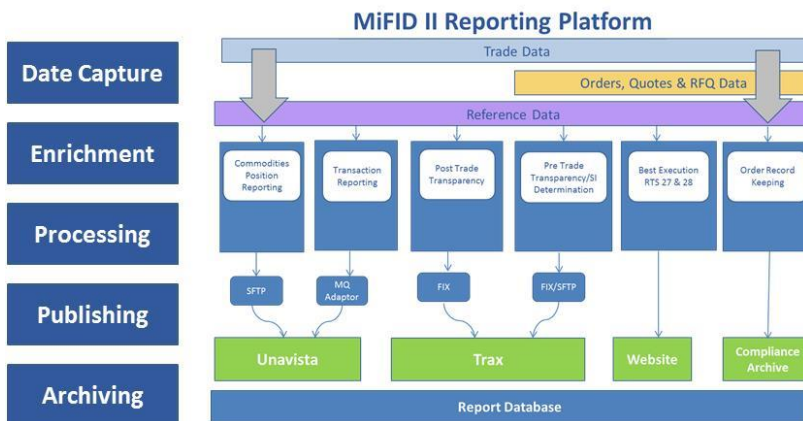
Background

Our client, an major investment bank, chose Kx as their sole reporting platform for end-to-end delivery of all required Regulatory Technical Standard Reports (RTS) for MiFID II across multiple asset classes including: Fixed Income, Derivatives, FX, Commodities, and Equities.

The solution was chosen for its power to capture, consolidate and replay order, trade and reference data from all of the bank's diverse data sources and perform data cleansing, normalisation and processing before distribution to the chosen APA and ARM. The solution also provides customizable dashboards enabling users to view, amend and approve input data and final output reports before submission to the regulator.

An on-site team of Kx consultants implemented and customized the solution to meet the client's specific requirements for each of the MiFID II modules. The project was delivered on a phased basis to accommodate client timeframes and priorities. Sample deliveries included

- **RTS 22 - Transaction Reporting:** Capturing trades from multiple source systems, determining if reportable and publishing in real time to the APA via MQ in ISO XML format.
- **RTS 1& 2 - Post Trade Transparency:** Catering for Off-Venue trades by capturing and enriching trade information with reference data before applying business logic to determine reporting eligibility and sending final reports in real time via FIX to the chosen APA.
- **RTS 6 - Order Record Keeping:** Fulfilling the regulatory requirement to capture all pre trade electronic and voice data in real time, storing for a duration of 7 years and enabling reconstruction of the trade life cycle



- **RTS 22 - Commodities Position Reporting:** capturing and enriching commodities positions from various trading venues with reference data such as client code, ISINs and venue codes, before publishing reports via sFTP to the APA.
- **RTS 27 - Quality of Execution:** Providing the capabilities to replay historical data, link pre and post trade data, code product-specific business logic and perform calculations on timing/yields/price necessary to provide evidence of execution quality
- **RTS 28 - Top 5 Venue Report:** Consolidating data on the client's Top 5 venues in terms of trading volumes per asset class on an annual basis for aggregated reporting.

Client Benefits

The client was able to meet their MiFID II obligations and alleviate data concerns associated with meeting future regulations, with all of the bank's data integrated and accessible in one system.

Our client recognised that, with the assistance of Kx, MiFID II presented opportunity to evolve their data management systems to expand their business capabilities.

As a result of the success of MiFID II and the reusability and ease of expansion of the Kx platform, our client has chosen Kx again as the solution for their MAR and AML obligations.

MiFID II Reporting The Data Challenges

Data Ingestion Capturing orders and trades across all asset classes from multiple systems and venues through the Kafka messaging bus

Data filtering and Eligibility – Applying complex business logic to determine which trades are eligible for MiFID II reporting. i.e. identifying duplicates, filtering out any out-of-scope trades/orders or trade events

Data Enrichment – Connecting to multiple internal and external reference data sources in order to enrich trade information for eligibility checks

Exception Handling – Any trades that fail validation as a result of missing reference data or are deemed ineligible for reporting are placed into the exception handling workflow to be investigated by Operations through Kx front end dashboards with report visualisations.

Publication – reports are sent via Kx gateway Fix or MQ adaptors in the required format to the relevant APA or ARM for onwards submission to the Regulator.

About Kx

Kx has been the software leader for complex analytics on massive-scale streaming data for over two decades. The Kx technology is an established and trusted standard for trading, surveillance and research in financial services. Kx has emerged as the elegant, integrated solution to the analytic needs of the Pharma, Retail, Utilities and High Tech Manufacturing industries scaling effortlessly to the data challenges of the Internet of Things.

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Contact us at sales@kx.com or visit www.kx.com