# **Kx Data Refinery**

### **Use Case: Best Execution Monitoring and Reporting**

## **Background**

In preparing for MiFID II's Best Execution Reporting obligations our client sought a solution that looked beyond the end reports alone. Instead they wanted a solution that addressed the problem from the ground up, one focusing on data at its core with supporting tools for consolidation and enrichment; one that in addition to simplified, streamlined regulatory reporting would extend to Best Execution Monitoring and beyond. In short they sought a platform for enterprise-wide data capture, cleansing, normalization, processing and distribution. They chose Kx Data Refinery.

### The Challenge

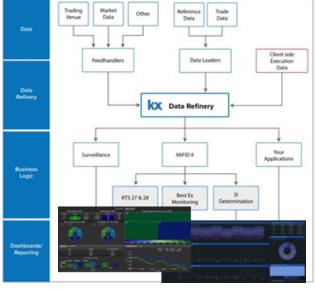
The initial challenge in Best Execution reporting is capturing and synchronizing data from multiple sources, including market data feeds and order and execution systems to enable comprehensive market reconstruction. Once captured the data needs to be continually monitored for changes in symbology, corporate actions, categorizations and other areas that require ongoing normalization and recalibration of resulting analytics. These changes must be accommodated automatically and with minimal effect on the reporting systems.

# The Best Execution Challenge

While Best Execution reporting obligations are centered around RTS 27 and 28, companies also face broader demands of Best Execution monitoring. Under these obligations investment firms who execute client orders must review and monitor the effectiveness of their order execution workflows to identify and remediate and deficiencies in providing the best possible outcome for their client.

This requires flexible access to complete, accurate and timely information on all order, trade and market events. It requires a new model of enterprise data management – the Kx Data Refinery.

# The Solution: Kx Data Refinery



- The diagram to the left shows the high level logical architecture for a Kx Data Refinery implementation. It illustrates how data is captured across markets, orders, executions and reference data.
- Our polymorphic server-side API ensures consistency of access to all content irrespective of data source and schema.
- The resulting data and associated analytics can then be served out directly to Best Execution monitoring and reporting engines without those solutions needing to recapture and persist their own copies of the data.
- Built-in analytics include liquidity, order and price ladder profiling at execution-time supported by postexecution fill, slippage and rejection rates to provide a comprehensive retrospective execution assessment
- The Refinery API also means data can be served to multiple other applications across the enterprise for similar processing such as TCA or SI Determination

A centralized platform for data capture, management, analytics and distribution

#### **Client Benefits**

- Complete, accurate and timely Best Execution Monitoring and Reporting.
- A complete, centralized data set ensuring consistency and accuracy of ALL reporting obligations across the enterprise.
- · Complex market changes like symbology modifications and corporate actions are automatically accommodated.
- By centralizing content in a single data management solution, Kx Data Refinery provides future proofing and protection from the costs of future regulation no need to recapture data for the next regulatory use case!
- A single consistent API for accessing a centralized data store enables organisations to extend the downstream use case set independently and implement new solutions in-house as and when required.

### **About Kx**

Kx is a division of First Derivatives plc. Listed on the London Stock Exchange [FDP:LN] First Derivatives is a specialist software and consulting organization with a uninterrupted track record of customer success and profitable growth since it was listed in 2002.