High Performance
Achieved with **kdb+
Caching Layer**

VERSION 1

An FX and Fixed Income Division of a Global Investment bank engaged Version 1 to enhance their access to real-time and historical data for algo trading engines and quants.

Customer Challenge

The customer had vast amounts of big financial data stored in a large kdb+ data warehouse. Although the existing warehouse was optimally designed, they still needed a rolling subset of data to be immediately available at all times.

From large historical reference data tables to high-frequency real-time pricing data, users wanted instant access. Providing big data fast is what kdb+ is built for – but we needed to take it a step further to give an edge to their algo trading and quant analysis.

Power of kdb+

Version1's kdb+ specialists coupled the power of kdb+ with high-performing hardware to build a customized central caching solution. Working with the customer's requirements of speed and scalability, a bespoke gateway layer contained in-memory mappings to trade and reference data.

This was implemented across all asset classes, from municipal bonds to FX – eliminating latency problems. Given the volatility of such a system, robust failover safeguards ensured the system ran smoothly for its thousands of daily users.

Real Differences, Delivered

As a result of this engagement, the following benefits were delivered to the customer:

- A customized central caching system which significantly speeds up data retrieval
- Readily scalable solution that can be dynamically applied to address any platform's needs
- More reactive and efficient algo trading applications

VERSION 1