



BANK INCREASES TRADING EFFICIENCY

GLOBAL BANK VISUALIZES REAL-TIME TRADING ACTIVITY WITH ALTAIR

About the Customer

The client is a global bank that offers a full range of wealth management, retail banking, and commercial banking services. It operates in more than 60 countries, has more than 200,000 employees, and has assets of about \$3 trillion. Its commercial banking services positions it among the ten largest investment banks in the world and it provides both buy-side and sell-side services to individual and institutional clients. Its trading operations deal in equities, credit, rates, currency, commodities, and their derivatives.

“

We use Panopticon so our traders have consistent visibility into everything happening in our primary trading system. They no longer rely on hourly snapshot emails or end-of-day reports, which is critical during index rebalances and other volatile trading periods. They can make timely and fully informed decisions quickly as well as look at client flow over long-time horizons to gain specific insights that support more productive, data-driven client discussions.

Client Analytics Team Lead,
Markets and Security Services

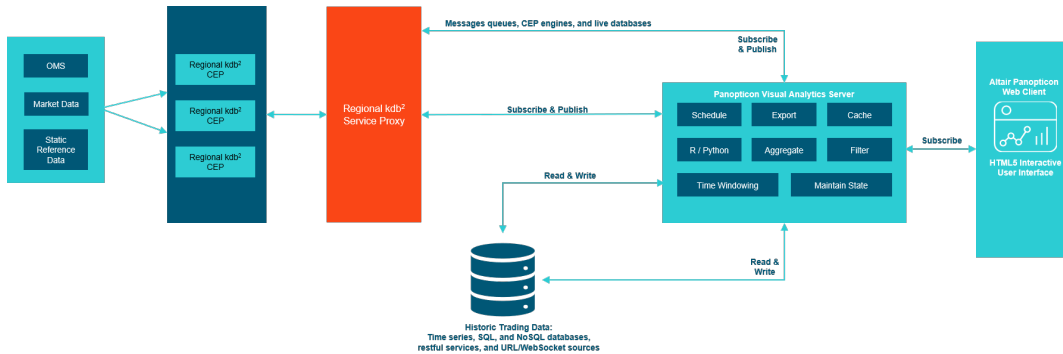
Their Challenge

The bank's traders use an order management system (OMS) to manage trade execution. It provides some level of visibility into the trading workflow, but it's not designed to display aggregated information or make on-the-fly comparisons between current activity and historical trading data. Also, it doesn't support filtering to help traders answer questions like: Have our new emerging markets product offerings helped us attract more business in the Middle Eastern markets? The OMS maintains multi-day open orders and data completed orders for a few weeks to allow rebooking, but does not store and display large amounts of historical data that would let traders analyze trends and spot patterns in trading activity.

Our Solution

Bank personnel became aware of the capabilities of [Altair® Panopticon™](#) real-time streaming analytics through colleagues working at other major financial services firms. The bank approached Altair about incorporating Panopticon into its own trading infrastructure. After demonstrations, the team implemented a proof of concept (PoC) that lasted three weeks and drew on the expertise of several of the bank's senior IT leaders and a group of senior traders and risk officers.

The bank had previously implemented Kx kdb+, a specialized in-memory columnar database for handling time series data. Its analytics team recognized that Panopticon supports excellent integration with kdb-based data warehouses and leveraged that capability to go from a successful PoC to full implementation within 30 days.



The bank's technology stack includes a Tomcat web server to run the Panopticon software. Users access their dashboards over a secure intranet using standard browsers. Order and execution data from the OMS and market data flow into the kdb+ data warehouse, and the bank uses Panopticon's native connector to bring data from kdb+ into the Panopticon environment to visualize and analyze it.

Results

The bank's trading, regulatory compliance, compliance surveillance, and middle office operations personnel use Panopticon dashboards throughout the day to monitor and analyze trading activity, client flow, risk, and profitability. As such, they don't need to wait for end-of-day reports to adjust their trading strategies or select different execution venues any longer.

Users can aggregate historical data for any period and perform on-the-fly comparisons between real-time trading activity and historical activity by trader, desk, asset type, and client to identify outliers and anomalies that may indicate new trading opportunities or profitability threats.

Users can also export filtered subsets of data to spreadsheet programs or PDFs to use in presentations and post-trade (trade cost analysis) reports.

Additionally, traders and risk officers can build and modify their dashboards as needed without IT personnel assistance, which reduces both the support resources the trading team needs and the time it takes them to respond to fast-changing market conditions. And users can save their dashboards, including filtered views and pivots, and share them with their colleagues as desired.

To learn more, please visit altair.com/data-visualization



TOP: Make on-the-fly peer comparisons by client, venue, and other parameters.

BOTTOM: Visualize time series data down to the nanosecond timestamp.