Cantor Fitzgerald Taps Kx Systems’ kdb+ For Real-Time, Historical Data Analysis

Cantor Fitzgerald has gone live with a system to handle historical data analysis and immediate querying of streaming market data based on Kx Systems’ kdb+ database and “q” programming language.

According to the vendor, Cantor brokers use the system to track their portfolio risk and trades in real time, in relation to other trades being made in the market, immediately gauging the momentum of price moves. This capability enables Cantor to make trading decisions instantly and get in and out of a market quickly, without compromising risk management, Kx says.

Cantor began working with Kx’s software in November 2005 and wrote a back-testing programme in two days. Other capabilities were then added to build on the kdb+ architecture for historical and real-time data. “The ability to integrate real-time publishing with historical searches made kdb+ the obvious choice for our new analysis system,” according to Jacob Loveless, senior vice president at Cantor. “Everyone talks about real-time risk management, but with kdb+ we actually attain it. We’ve gone beyond simply knowing the risk to being able to act on it in the moment.”

Cantor is also using kdb+ support from Kx Systems’ sales and services partner, First Derivatives (FD). Support response using FD’s email support system is fast, says Loveless, who often receives a response in the time it takes to go and get a cup of coffee.

Simon Garland, Kx CTO, says that Cantor, like other Kx customers, chose its technology because it offers “one-stop shopping.” For the Cantor implementation, he says, “Right from the feed handlers, it is Kx the whole way through to the historical database. This makes the complete application simple to maintain and enhance, because there is only one database for the entire application. No conversion of incompatible data from various vendors is required.”

According to Garland, Cantor was also responding to two key trends Kx sees across its customer base. One is the desire to implement a single infrastructure to handle both streaming and historical data. “As well as dealing with fresh data in memory, these firms also want to be able to look at historical data as well, and they do not want it to be coming in a different format from another system,” he says. “Whether it’s streaming, real-time or historical data, it’s all the same, really – it’s just time-series data.”