About System K

## What is System K

System K is a high performance framework for building trading strategies or trading systems (does one build a trading strategy? Is this the correct verb?). The system allows one to perform the basic functionals required to get a trading system up and running, or build a fully automated trading strategy. Users can easily add GUIs, analysis tools, charts and graphs, and monitoring tools, as needed, in any language on any system (you use this word in two different context in the same paragraph. You might be more specific as to what you mean when you use it this time).

(I think unnecessary) The System K platform can:

* Connect to a FIX or ITCH market and receive market data
* Collect market data into an order book (either our implementation or yours)
* Aggregate multiple market BBO data into a single order? book
* Distribute market data from any single market or from the aggregated book over a local network using TCP/UDP or PGM
* Add, modify, or cancel orders on FIX markets
* Serialize orders to a/the database
* Use multiple languages to develop strategies, data analysis tools, store tick data, or smart-route orders.

System K delivers the core functionality and the user can extend it in any language. System K provides the plumbing infrastructure so the user can focus on their trading strategy.

System K has passed compliance tests for several trading venues including Baxter, FXCM Pro, ADS Securities, and FastMatch. Additional venues can be conformance tested as needed.

## Components

The system consists of the following components:

1. Market data listeners – with implementations for FIX 4.2 – 5.0SP2, ITCH and soon Interactive Brokers.
2. A basic orderbook implementation – the orderbook handle input and updates from each exchange.
3. Market data broadcast – ZeroMQ is used as the transport layer to broadcast market data messages and synchronize communications.
4. Aggregated order book – all market data may be optionally fed into a single orderbook where only the best prices are retained from all exchanges and broadcast as a separate market data message.
5. Order entry – including implementations for FIX 4.2 – 5.0SP2

## Technology

System K is built entirely on open source software allowing the user to have access to each of the system’s components and can modify them as necessary. The system is built on the following trusted and proven high-performance modules?components:

* Zero MQ messaging
* Quickfix FIX Engine
* Boost C++ libraries
* Google protocol buffers, perftools, and gtest

The System K developers are always looking for ways to push the system capability and functionality with new tools and techniques. We have three primary goals when considering new system enhancements and improvements:

1. Performance
2. Stability
3. Scalability

System K was developed purely from open source products and is distributed under the GNU LGPL license.

## Future Directions

Since the developers are always trying to improve performance, stability, and scalability they are currently evaluating NoSQL databases for reporting, a new open source FIX engine which promises to be 50% faster than the current QuickFIX/C++ release.

They are alsoas a part of the core product offering.

## More Information

For further information please contact us directly.

Email: [info@capitalkpartners.com](mailto:info@capitalkpartners.com)

Phone: +31655836711

Twitter: @capkpartners