



Skyler C3 Ultra Low Latency Trading Solutions: CEP applied.

Faster sourcing of liquidity. Faster trade data analysis. Faster algorithm execution. Faster and smarter order routing.

Skyler Ultra Low Latency Trading Solutions: CEP applied. Complex event processing brings speed, flexibility, and stream analytics to trading systems. In addition to extracting and analyzing real-time market data, this technology allows for identifying important patterns and deriving key indicators that can strongly affect trading decisions. Traditional CEP vendors focus on delivering general purpose stream processing platforms that support their customers in developing their low latency trading systems. Skyler is taking a different approach. Skyler has committed to applying CEP technology and delivering end-to-end trading solutions to address very specific problems within the Financial Services Industry. The Skyler C3 ultra low latency solutions include:

- C3 Liquidity Discovery Solution
- C3 Tick Analytics Solution
- C3 Algorithmic Container Solution
- C3 Order Routing Solution

Skyler caters exclusively to the Financial Services Industry through trading solutions that combine an event processing framework with highly specialized stream operators, caching entities, and analytics modules. The Skyler C3 Trading Solutions connect to Level I and Level II market data feeds and filter, merge, and aggregate the data in real-time. The C3 Solutions cache streaming data to provide a variety of different views and allow for event detection, data analysis and correlations to be easily made. These highly optimized capabilities are brought together to address specific trading needs. The results are end-to-end trading systems that process real-time market data with micro second latency.

The Skyler C3 offerings represent an 80/20 solution – 80% of the solution is complete and 20% is open for customer specific logic. All the focused solutions come with the core features and functionality required to address specific trading problems, while allowing for additional customization, inspiration and innovation by Skyler’s customers.

The solutions offer a host of financial services specific data processing entities including trade, quote, and order book caches, as well as stream operators and analytics modules that allow the user to embed third-party libraries or use scripting languages to develop algorithms. Skyler’s solutions provide integrated replay, performance testing, and monitoring utilities and a comprehensive SDK to communicate with the solutions or embed custom business logic.

Skyler’s solutions include:

- Embedded feed handlers to the direct exchange feeds (NA Level I & Level II)
- Adapters to standard consolidated feeds (Reuters, Comstock,...)
- Adapters to feed handling infrastructure (RDFD, Wombat,...)
- Adapters to messaging systems (Tervela, RMDS,...)

The primary advantages of the 80/20 approach are speed and a significant reduction in integration and deployment time. All this is accomplished with the ability to embed highly sophisticated and proprietary business logic to ensure competitive advantage.

Skyler’s ultra low latency trading solutions allow the customer to achieve:

- Faster sourcing of liquidity
- Faster trade data analysis
- Faster execution of custom algorithms
- Faster and smarter order routing

These capabilities result in an overall increase in trading efficiency, higher fill rates, and lower market impact.



Skyler C3 Liquidity Discovery Solution

The Skyler C3 Liquidity Discovery Solution provides deeper and faster insights into the fragmented liquidity pools. It takes in the raw US equities Level II feeds and aggregates the order book data across multiple venues in real-time while supporting various aggregation types. The Skyler C3 order book has benchmarked a data processing latency of ~10 microseconds.



Skyler C3 Algorithmic Container Solution

The Skyler C3 Algorithmic Container Solution provides a comprehensive algorithmic trading framework that facilitates and accelerates the execution of proprietary trading algorithms. The solution provides an easy to use interface to access different views of the streaming or cached trade, quote, and order book data. The custom algorithmic modules can be developed using scripting language or can embed third party analytics libraries. The benefit to Skyler clients is increased algorithm execution speed while reducing development time and cost.

Skyler C3 Tick Analytics Solution

Skyler’s Tick Analytics Solution provides faster insights into the intra-day time series of trade data. This allows clients to run analytics over the corrected time series trade data on a per-venue or cross-venue basis. These calculations can include VWAP or venue specific execution quality measurements. The solution integrates Level I feed handlers, dedicated caching mechanisms and support for window based time series analytics.



Skyler C3 Order Routing Solution

The Skyler C3 Order Routing Solution receives FIX orders and slices and dices the orders based on the available liquidity and a host of other variables. Then, it routes them to the different execution venues to achieve best price while ensuring RegNMS compliance. The benefit to the customer includes reduced latency and fewer steps to the execution venue, lower overall execution costs, and higher fill rates with minimal market impact.



Skyler develops ultra low latency trading solutions for faster and smarter trading, while emphasizing flexibility, ease of use, and simplicity of integration. The solutions combine powerful in-memory data processing technologies with market specific business logic driving more innovative trading systems. For more information, please contact us at contact@skylertech.com or visit our website www.skylertech.com