Algorithmic Platform

Our *Algorithmic Platform* is based on loosely coupled layers and simple atomic structures that together create an environment that supports powerful and complex strategies.

Flexibility, clarity and accuracy is achieved through an architecture of vendor agnostic *services* (representing external interactions), and *managers* (providing enhanced functionality).

Simulation

Our *Market Simulator*, based on both replay data and artificial trading agents, supports development, diagnostics, what-ifs, performance analysis, and custom models for alpha generation, profit taking *etc*. It operates both interactively, and in a highly parallel backtesting mode.

Conditions can be configured for crashes, steady or erratic markets. Agents can be injected to model HFT market markers, trend followers, dispersion traders, arbitrageurs and many other kinds of market actor.

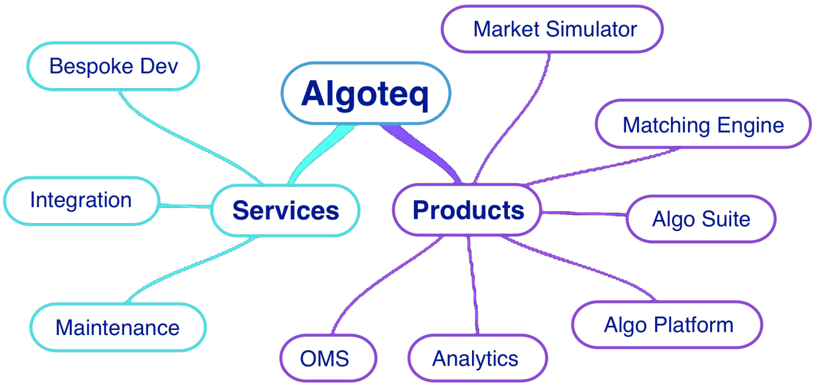
Market impact models are super-imposed through direct manipulation of the incoming orders.

Scalability

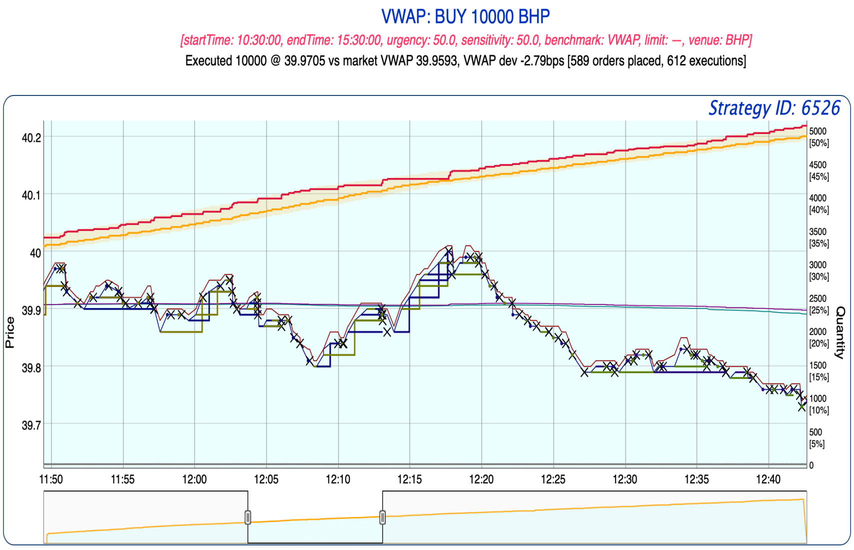
The system is fully scalable, from large data centre deployments, down to a single notebook running all application layers and realistically simulating a cluster of strategies.

Transforming Dreams to Reality

At Algoteq we dream of simulating every imaginable market, in order to create and test algorithms without the constraints of exchange hours and test market availability.



Incorporated into our full stack product suite is a sophisticated exchange simulator and matching engine, allowing testing of strategies in all market conditions. Sophisticated analytical and visualisation tools are available for interactive and automated performance assessment.



Crucially, we enable our clients to do the same.

Join us on this journey, let's challenge the status quo, and make history together!

Algorithm Suite

The *Algoteq Algorithm Suite* is a multi-tier model, where low-level trading tactics capture focussed, independent aspects of trading, and strategies coordinate multiple tactics to achieve overall trading goals.

Since all inputs, outputs and data are strategy independent, algo amend and customisation are handled in a straightforward and natural manner. This also enables a uniform approach to multi-tier algorithms, multiple asset class support, quantitative models and signals, anti-gaming and smart routing.

Clean abstractions of both human and machine trading lead to efficiently coded and individually testable units, that are easily combined into either standard or bespoke algorithms.

The standard algorithm suite includes:

- *Profile algorithms* (*VWAP, TWAP*)
- *Participation algorithms* (*POV, IS*)
- *Benchmark algorithms* (*IS, MC*)
- *Passive algorithms* (*PEG, ICEBERG*)
- *Responsive algorithms* (*SNIPER, TOUCH, STOP, LIMIT-TO-MARKET*)

Additionally, *liquidity seeking algorithms* are a more general class of algorithm, created by combining tactics with specialised smart order routing and anti-gaming logic, and custom analytics/ signals driving dynamic take profit or stop loss.

Reference Data

A *Reference Data Service* provides derived data to the trading components, covering all significant details of a stock's historical trading.

The data can be inspected using our visualisation tools either independently, or in the context of a running strategy.

Our Algorithms

Our Algorithm Suite is a customisable framework, with powerful abstractions of trading behaviour, a variety of algorithm implementations, stock specific time-dependent reference data, and tools for simulation, analysis and visualisation.

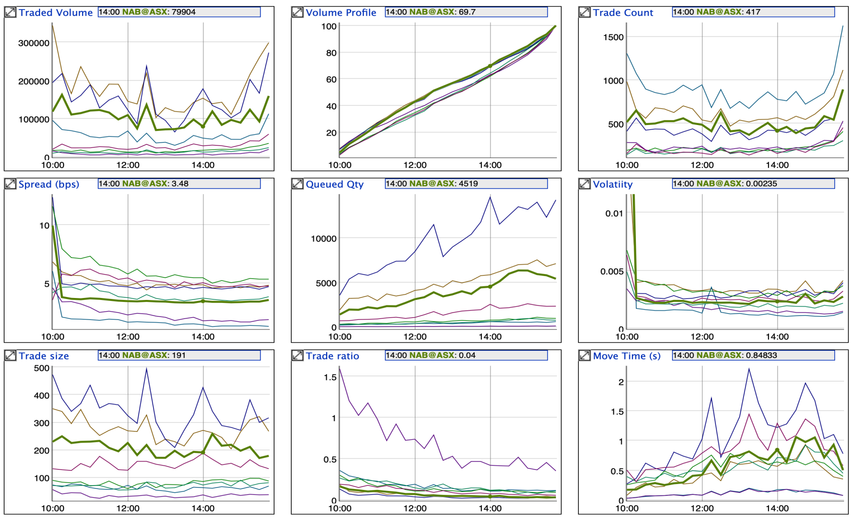
The Suite explicitly supports a cycle of development, evolution, visualisation and optimisation, and guarantees on-going suitability in the face of rapidly changing markets and requirements.

Data-driven Innovation in Financial Markets

For meaningful and productive handling of noisy and high dimensional real-time and historical data, analysis must be informed by established methods, while also exploiting appropriate technology to generate innovative custom outcomes.

Foundations include high performance databases, FPGAs for streaming data, cloud for access-anywhere deployment, and modern web technologies for ease of use and portability.

At Algoteq, we build our strategies, analytics and visualisation upon a common core, creating a powerful financial data ecosystem providing insight across the entire problem domain.



Get in Touch

Algoteq delivers customised, end-to-end services ranging from architectural consulting to bespoke software development. Our systems are high-performance and low-latency, ensuring optimal execution and cost-effectiveness for every transaction.

Whether you represent a small hedge fund, or a large investment bank, Algoteq offers the perfect fit.

Contact us today (contact@algoteq.com) to experience the future of finance.