

Fixed Income Analysis Products +46 8 6780990 info@algorithmica.se

Product brief

Quantlab Develop and distribute quantitative financial analysis





Quantlab run on Windows NT/2000, and support most relational databases like MS SQL, Oracle, and Sybase.

Flexible user workspace, for real-time and historical analysis.

Key concepts

Quantlab is available in two versions, the Developer edition and the User edition. The Developer edition is the more comprehensive application, used by analysts to build quantitative models and views. In the User edition, traders and sales people can access the analysis through graphs and tables, and change parameters like dates, markets and instruments.

Unique for Quantlab is the tight link between financial modeling, real-time quotes and historical time series. An important design goal is also the concept of database driven analysis: All instrument and yield curve definitions and other relational information are stored and updated in a database. For creating time series data, the optional Algorithmica History Server integrates seamlessly with Quantlab.

Product brief – Quantlab



Comprehensive developer workspace, for designing, writing, and testing financial ideas.

Examples of QLang features

General features

- Object-oriented functional language
- Debugging possibilities
- Local and global variables
- Program-flow: for, while, if-else etc.
- Vector and matrix algebra and functions
- High-level treatment of time series data
- Statistical functions

Examples of financial functions

- Date & calendar functions
- Price-yield and all sensitivity calculations on bonds, depo, swaps, futures, FRA
- Curve blending of depo, FRA & swaps
- Horizon investment functions
- Asset swap pricing
- Zero coupon curve modelling using a wide range of methods: Bootstrap, Nelson & Siegel, B- & C-Splines, Max smoothness, Tanggaard, Spread models, to name but a few.
- Pricing of instruments using zero coupon models

Open-ended solution

- All QLang functions available through COM interfaces from Visual Basic, Excel and .NET.
- Develop your own library code using QLang.
- Create client-specific instrument classes or include third-party library code using C/C++ and the comprehensive Quantlab API.

Algorithmica Research AB

Quantitative finance — made user friendly

Using the Quantlab Developer edition, the quantitative analyst can focus on designing and testing financial ideas and not waste time on cleaning instrument data or supportive programming. The Quantlab expression language QLang is a high-level programming tool, following modern programming conventions. It contains an extensive financial function library which makes programming fast and easy. Using a simple drag-and-drop technique the analyst creates tables and graphs based on functions written in QLang.

The analyst's work is saved as a workspace, formatted for the use of traders or other analysts in the User edition of Quantlab. The workspace works as an advanced live report, updated with realtime data.

The function library mainly covers the fixed income market and is currently being extended to other asset classes. User-defined classes may also be written using the C++ API and all functions are available through COM interfaces from .NET, Excel and Visual Basic.



The function browser.

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