MACD

QUALITY TRADING SOLUTIONS

TRADING SYSTEM GLOX
TRADING MADE SIMPLE

Information Brochure

glox

TRADING FOR PROFESSIONALS

GLOX is a tried and tested user friendly execution management system which is hosted by MACD. Hosting by MACD reduces the internal IT overhead and eases connectivity to a range of trading destinations.

The high degree of straight-through processing which can be achieved with GLOX supports the current regulatory requirements, reduces errors, and makes trading and workflow management efficient.
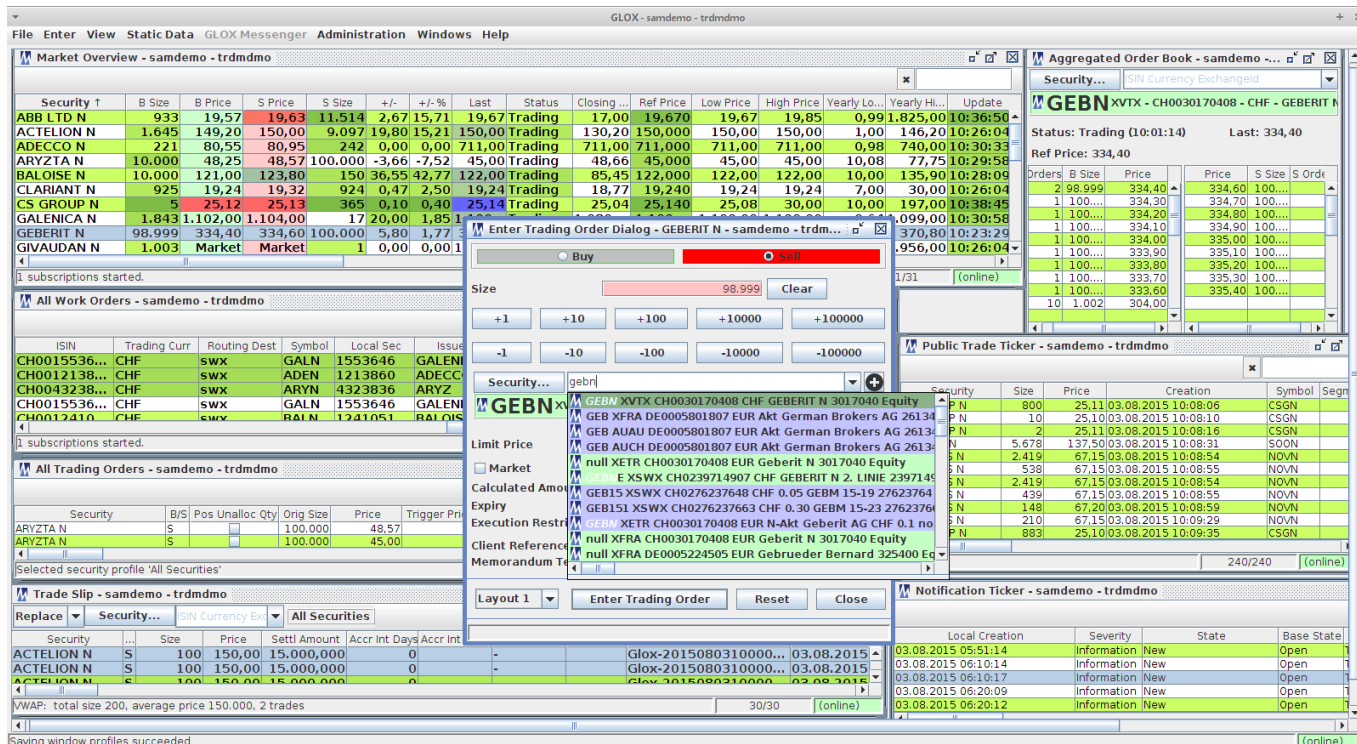

Trading System GLOX Overview

GLOX processes more than 1,5 million trades annually in various asset classes, currencies and to many destinations worldwide. GLOX is very flexible and adaptable. This allows us to gradually expand the offering, e.g. with other brokers, exchanges and MTFs.

GLOX FRONT END

In the GLOX front end you have a range of useful functionalities, which are constantly expanding. You can configure the system to match your personal requirements.

REMO KUNZ, HEAD OF TRADING/ SALES, BEKB I BCBE

'Thanks to GLOX, we not only reduced a large part of our costs but also gained a margin of independence. Automation has simplified processes and largely eliminated sources of error. The software is flexible and customizable, which suits us very much.'

GLOX Trading Client

EXECUTION MANAGEMENT SYSTEM

The GLOX execution management system is not only flexible but supports a wide range of work flows. Order Monitor, multiple order types and field configurations allow consistent coordination with your core banking, back office and risk management systems.

GLOX enables pooling and splitting for situations when multiple orders should be grouped together into one market order – for example for fund trading. Also, functionality for market making is supported. GLOX can be used for customer trading (execution), principal trading and market making activities.

INTEGRATION AND INTERFACE MANAGEMENT

GLOX can be integrated within your system landscape using the highly developed FIX Interface. Alternatively we can develop other interfaces on request We already have interfaces to several banking systems in production, e.g.

- ✓ Apsys
- ✓ OTMS
- ✓ BBP
- ✓ Olympic
- ✓ Avaloq
- ✓ TCS Bancs

We are happy to support you in the process of introducing new banking systems. Our extensive experience in such projects helps us to contribute to the successful implementation of new interfaces to GLOX.

DENNIS PANNHAUSEN, HEAD OF SOFTWARE ENGINEERING, MACD:

'We use the agile method Scrum with two week sprints to plan customer requirements. This provides a flexible and fast implementation.'

SELECT YOUR GLOX SERVICES!

GLOX EXCHANGE DIRECT

Trade GLOX directly on various exchanges. GLOX fulfills the requirements of the stock exchange, implements releases with new features, enables compliance with legal obligations to act as a directly connected exchange participant. GLOX can be operated independently or your bank-internal system landscape (banking system) can be integrated. This allows a high degree of straight-through processing (STP).

✓ SIX Swiss Exchange
✓ BX Swiss
✓ EUREX

With our product XLFIX Quoting you can also market make on all stock exchanges. More information can be found on our web page ‚offering/XL-FIX Quoting'. Of course, GLOX can also be used without a direct exchange participation where you trade via a broker in these markets, see ‚GLOX Broker Connect'

GLOX BROKER CONNECT

With only one technical interface, GLOX Broker Connect provides access to well-known brokers with worldwide stock exchange connections. GLOX supports the brokers' offering and thus all asset classes, as well as special order types and algos for securities trading. Order Routing and an Order Monitor direct the orders to the right broker.

The following brokers are currently available

✓ Basler Kantonalbank
✓ Bloomberg Tradebook
✓ Clearstream
✓ Credit Suisse
✓ Pictet & Cie
✓ UBS
✓ Vontobel
✓ Zürcher Kantonalbank

We are happy to expand the list of brokers based on your requirements.

GLOX FUND TRADE

With GLOX Fund Trade funds can be traded efficiently electronically. GLOX supports the „pooling" and „splitting" of orders. Before the cut-off time of the product, the order can be sent automatically to the broker or released manually.

The following fund brokers are currently available

✓ Swisscanto
✓ UBS

We are happy to expand the list of brokers based on your requirements.

GLOX BLOOMBERG SEND

GLOX Bloomberg Send enables direct forwarding of orders in Fixed Income or Equities securities to Bloomberg. The order can be released and traded on the Bloomberg trading platform to any broker from your Bloomberg universe. The trade confirmations transmitted back to your core banking system via our STP network. Modifications and deletions are possible from the banking system, GLOX or directly in Bloomberg. GLOX ensures that these are reproduced accordingly in all systems. The Bloomberg-certified GLOX Bloomberg Send interface prevents multiple entries and reduces error sources caused by manual input.

GLOX BLOOMBERG RECEIVE

With GLOX Bloomberg Receive, you act as a broker and receive orders from other banks through Bloomberg. The orders received are forwarded and traded fully automatically via STP to the stock exchange or other brokers. The deal will be sent back to your banking system and your customer via Bloomberg. This allows your customers to send, modify or delete electronic orders.

GLOX BLOOMBERG ALGO

The algorithmic capabilities of Bloomberg Tradebook allow you to take advantage of extensive algo trading within the GLOX network. It works like this: you define your algo parameters in GLOX and we send this information to Tradebook. Here, the partial placements that are executed on the SIX Swiss Exchange are calculated and GLOX is notified to send the order to the stock exchange. All trading on the stock exchange is done with your stock market membership, ensuring that you have full control, visibility and documentation of all orders going public.

GLOX DATA WAREHOUSE

If you are interested in archiving your trading activities, GLOX Data Warehouse is the right choice. All relevant data (orders, trades, modifications) are stored for 10 years. By integrating a search function, you can find desired information quickly and easily. This service is useful for auditing and analysing business development.

GEORGE MACDONALD, CEO MACD:

‚Adherence to our quality standards is very important to us - the stability and availability of our systems, a reliable support, as well as a personal on-site consulting, is naturally part of our service.'

RUNNING GLOX

GLOX can be implemented in two different ways:

INSOURCING - RUN AT CLIENT'S SITE

GLOX can be run in the clients own data centre. In this solution the software is installed at the client's site. The client monitors the connection themselves or, alternatively, delegates this to MACD with remote access.

OUTSOURCING - HOSTING BY MACD

The ASP model (Application Software Provider) includes a connection to GLOX which enables access to all markets available in the GLOX network. This model is cost efficient because the IT footprint remains very small. MACD runs, maintains, and monitors the systems and can react immediately. Our dual-site model with two data centres ensures very high reliability and availability of the system.

Using a hosted solution has a range of benefits:

✓ **MONITORING**
We have a fully automated alert and alarm system that ensures that we can pro-actively address problems as they occur.

✓ **HARDWARE**
We buy, maintain, and replace hardware as part of the fixed price.

✓ **UPGRADES**
We perform necessary software and hardware updates to ensure that the systems remain up to date.

✓ **RESOURCES**
Save costs through shared resources with other customers. An example is market connectivity where we maintain the exchange connection and thereby reduce your infrastructure.

✓ **NETWORK EFFECT**
Our customers can benefit by establishing links to other customers in our trading network. For example, a bank may act as a broker to other customers for a specific asset class. Or an exchange might benefit from our customer base as potential new participants.

✓ **ENVIRONEMENT**
Through shared resources and modern virtualisation techniques, we are able to match the energy usage to the required performance. In this way the total energy use can be significantly reduced.

ANDRÉ GAUTHIER,
MANAGING DIRECTOR,
E. GUTZWILLER & CIE
BANQUIERS

'The basic values of MACD are for me: A very good service, a very good support, very prompt and above all very personal, with one of the highest levels of flexibility that can be achieved in software development.'

SERVICE AND SUPPORT

Our highly motivated and very well educated support and development team is experienced in helping you with issues. Almost all supporters also work on the development of our GLOX trading system. So your contact person is a real GLOX expert.

Our ticket system ensures that all questions are documented and any problems are solved in a timely manner. Also feedback about improvements to our software or new features are documented and planned in for future releases.

Our team in Urdorf (Zurich) attends personally to your concerns. Not only on the first trading day but also for example for system changes or a migration we are happy to visit you personally to consult and ensure a smooth process. Of course we also visit you regularly to collect your feedback and to ensure your satisfaction.

SHAPING THE FUTURE WITH MACD!

Take advantage of our many years of knowledge in the securities trading sector and our comprehensive offering:

- ✓ We create process analyses.
- ✓ We carry out feasibility studies.
- ✓ We plan your individual project.
- ✓ We develop the software.
- ✓ We take over the hosting.
- ✓ We advise and train you.
- ✓ We support you personally.

ABOUT MACD

As specialist for electronic trading, MACD has been successfully developing products and services for financial institutions for more than 20 years.

The company is market leader in trading connectivity in Switzerland. More than 60 banks and exchanges across Europe trust in the comprehensive range of services in software development, project management, consulting, hosting and support.

Around 40 IT engineers, computer scientists and economists are working on innovative solutions at locations in England, Germany and Switzerland.

Since 2004 MACD has been a member of the FIX Trading Community, where George Macdonald, CEO MACD has been involved in various roles, including director.

WANT TO KNOW MORE ABOUT MACD AND GLOX?

Please feel free to contact us at any time!

TOMAS FORT

HEAD OF SALES & ACCOUNT MANAGEMENT

tomas.fort@macd.com
M +41 79 749 49 30
T +41 43 343 30 00

www.macd.com