



aixecute

Exchange Made Simple

Information Brochure

Exchange Made Simple

Our exchange system Aixecute is a **complete exchange solution** which integrates all necessary components. This avoids long and complex integration of various software products. Aixecute is the ideal solution for banks wanting to run their own internal market place, or exchanges covering all asset classes. The product is scalable for larger volumes.

Aixecute has everything you require:

■ Matching Engine - the Heart of an Exchange System

The Matching Engine brings together all buy and sell orders according to the rules and priorities set by the stock exchange. The powerful set of rules processes the information from the orders in a split second, determines the new state of order book and the best bid and ask prices. Order book states such as „Stop Trading“ can be activated for special orders or when certain predefined conditions occur, which require clarification between buyer and seller. Of course, the common order types are supported.

■ Interfaces to Market Data Vendors

All market data can be sent from the stock exchange to vendors (Bloomberg, Reuters, Telekurs) in real time, allowing price data to be published worldwide in real time (subject to any local regulations). We can provide interfaces to other vendors depending on customer requirements.

■ GLOX Trading Front End

We can provide the user interface of our powerful trading system GLOX for customers of the stock exchange. With the trading front end customers are able to manage their orders at the exchange. More information regarding GLOX is available here: > [www.macd.com/offering/trading system](http://www.macd.com/offering/trading%20system)

■ Operations Client - the Cockpit of the Stock Exchange

The Operations Client controls and monitors market book activity. It provides an overview of the transactions and support functions for the market operations team. You have access to master data, such as trade opening times and can manage your instruments and indices. Manual actions such as „Stop Trading“ can be initiated with this tool, any automatic „Stop Trading“ events can also be tracked. All other operations tasks can be monitored initiated from here.

The screenshot displays the Aixecute Operations Client interface. On the left, there is a 'Static Data' sidebar with a tree view of security categories like 'Securities (1/358)', 'Security History (0/0 + 777)', etc. Below this is a 'Filter' panel with 'Criteria' and 'Value' columns, and an 'Alerts' section with checkboxes for 'Show Pop-Ups' and 'Play Sound'. The main area features a table of securities with columns for 'Update T...', 'Security Short Name', 'Order Book SL...', 'External Order Book State', 'Order Book State Start', 'Order Book State End', 'Best Buy Price', 'Best Sell Price', 'Curr...', and 'Exchang...'. The table lists various companies like Wockhardt B10 AG, Rotim Immobilien AG, Swiss Finance & Prope, etc. Below the table, there are two detailed panels: 'Details for Order Book' showing 'Trading Halt Order Book' options (e.g., 'Until further notice', 'For 15 minutes') and 'OrderBookPosition' for 'Wockhardt B10 AG (WB10)' showing 'Buy Side' and 'Sell Side' order details with columns for 'Level', 'Number Of...', 'Size', and 'Price'.

FIX Connectivity

Integrating other existing trading systems with our FIX interface is straightforward. We already support a number of established platforms. Additional connections can be implemented on request.

Index Calculation

Aixecute supports the calculation of indices based on specially defined values of a desired group of listed companies. This includes ongoing automatic calculation and dissemination of index data to the vendors as well as updating the information on the stock exchange website in real time.

Link to Settlement

All transactions can be automatically transferred to the connected settlement organisation, or some securities can be marked for manual settlement and are excluded from the automatic settlement process.

Reporting

Certain actions, such as off-exchange trades where price discovery took place, can be subject to reporting obligation by the local regulators. A dedicated entry dialog on the stock exchange website allows the entry of appropriate information for all types of financial transactions. These are automatically processed in Aixecute and will be distributed to the relevant regulatory authorities as required.

Website Hosting

The exchange website allows you present your stock market brand. Of course, the instruments information is available and current prices and other market events are visible as well. We not only create your exchange website according to your requirements, we also handle the administration and the maintenance work for you.

Invoicing

The invoicing provides automatic compilation of all chargeable transactions per stock exchange member.

Proven

Aixecute is used by the BEKB | BCBE for their OTC-X (<https://www.otc-x.ch/>) platform and at the BX Berne eXchange (<https://www.berne-x.com/>).

The screenshot shows the OTC-X website homepage. It features a navigation bar with 'HOME', 'SUUCHE', and 'SITEMAP'. Below this are tabs for 'NEWS', 'MARKT', 'ENTWICKELUNGEN', 'INVESTOREN', and 'ÜBER OTC-X'. The main content area is divided into 'Headlines AWP KMU-Channel' and 'Aktuelle Analysen / Kommentare'. The 'Headlines' section lists several news items with dates and brief descriptions. The 'Aktuelle Analysen' section provides a list of recent market analyses and comments. At the bottom, there is an 'Indexübersicht' table showing various market indices and their performance.

Index	Wert	Änderung
OTC-X Premium	1005.61	23.01.2014
OTC-X Liquidität	305.43	23.01.2014 +2.2%
OTC-X TOP50	1913.39	23.01.2014 +1.1%
OTC-X All Share	3435.25	23.01.2014 +5.6%
OTC-X Banken	1742.22	23.01.2014 -2.4%
OTC-X Bergbau	1952.84	23.01.2014 +3.8%
OTC-X Befähigungsgesellschaften	808.68	23.01.2014 -6.5%
OTC-X Energie	2306.63	23.01.2014 -3.6%
OTC-X Immobilien	1384.29	23.01.2014 +1.1%
OTC-X Industrie	3917.33	23.01.2014 +2.5%
OTC-X Medien	12905.48	23.01.2014 +1.4%
OTC-X Nahrungsmittel	1626.19	23.01.2014 +1.8%
OTC-X Transport/Verkehr/Logistik	2151.65	23.01.2014 +3.3%
OTC-X Transport/Verkehr/Logistik	3208.63	23.01.2014 -1.7%

The screenshot shows the BX Berne eXchange website homepage. It features a navigation bar with 'MARKT', 'PUBLIKATIONEN', 'NEWS', 'REGULATORISCHES', and 'ÜBER UNS'. The main content area is divided into 'Die Schweizer Börsenplattform für KMU.' and 'Verbindet Unternehmer mit dem Kapitalmarkt.'. Below this is a 'BX Swiss' logo and a 'MARKTSTATISTIK' section showing a line chart of market performance. The 'MARKTSTATISTIK' section includes a table with columns for 'INDEX', 'STATISTIK', and 'INDEX'. The 'INDEX' section shows a table with columns for 'INDEX', 'WERT', and 'ÄNDERUNG'. The 'MARKTSTATISTIK' section also includes a 'MARKTSTATISTIK' table with columns for 'INDEX', 'STATISTIK', and 'INDEX'. The 'MARKTSTATISTIK' section also includes a 'MARKTSTATISTIK' table with columns for 'INDEX', 'STATISTIK', and 'INDEX'.

Running Aixecute

Aixecute can be implemented for you in two different ways:

■ **Outsourcing**

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 proactively address problems as they occur.
Hardware	We buy, maintain, and replace hardware as part of the fixed price.
Upgrades	A system needs to be maintained over time. We perform necessary software and hardware updates to ensure that the systems remain up to date.
Shared Resources	In many cases, cost savings can be achieved through shared resources with our 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.
Environment	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.

■ **Run at Client's Site**

Alternatively Aixecute 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.

Service & 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 Aixecute exchange system or our GLOX trading system. So your contact person is a real 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 Maur (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!

The rapid development of financial markets and regulatory conditions require standards which are often hard to fulfil. We provide **innovative solutions** which reduce your manual effort significantly. Our extensive network allows us to identify trends early and respond to changes quickly.



As a privately held family company, we are **independent** and can offer the ideal long term solution. We work with a fixed-price concept, so you always have a clear overview of the costs.

Compliance with our own high quality standards is very important to us - the stability and availability of our systems and a reliable support are a fundamental requirement for us. Our goal is to work with you in a **cooperative partnership** with regular, open communication, to respond best to your needs.

Our offering is comprehensive: We plan your individual project. We develop the software. We manage the hosting. We advise and train you. We care for you personally.

Experience / References

As one of the first application software providers in the finance industry, we are not only well experienced and have built up a profound understanding of the market, but we are also very proud that over 20 financial institutions rely on GLOX. A list of our references can be found here www.macd.com.



Would you like to get more information about MACD and AIXECUTE?

Please contact us at any time!

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About MACD

MACD has been offering innovative financial IT-solutions since 1996. We have developed from a family-owned company into an international company with locations in England, Germany and Switzerland. Approximately 30 highly qualified employees work on the development and support of software and solutions for the financial sector. Our offering covers software development, hosting, consulting, support and also tailor made solutions. We are a member of the FIX Trading Community. Further information can be found here: www.macd.com.