

# Comarch IT SOLUTIONS FOR BROKERAGE

A flexible tool which allows for the speedy design, testing and implementation of innovative charges and commissions packages

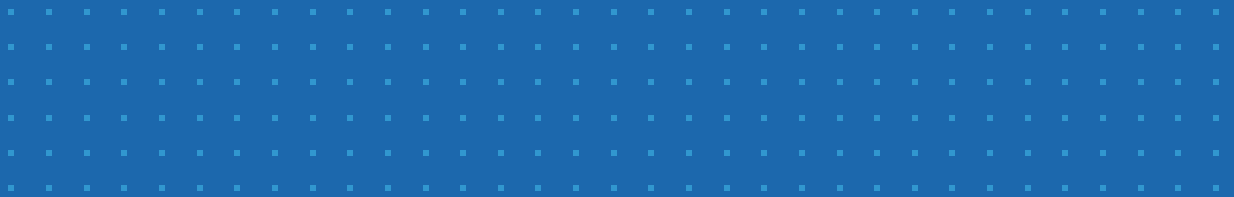


**COMARCH**  
CAPITAL MARKETS

Banking, Insurance & Capital Markets



## Introduction



Comarch has been delivering systems to various financial institutions for more than 15 years. In particular this includes banks, brokerage houses, insurers and asset and fund management companies. As one of the largest software producers in Central Europe, Comarch boasts many production lines, a rich set of competencies and most importantly a large group of satisfied customers. Our offer covers readymade solutions as well as the manufacture of dedicated systems and their integration. This folder presents Comarch's key solutions for brokerage houses.

A modern brokerage house should be able to effectively fulfill the requirements of individual and institutional clients using various trading platforms and access channels.

The most important challenges faced by brokerage houses are:

- guaranteeing clients access to any Stock Exchange, transactional platforms or other venues where transactions are made,
- using various methods when submitting an order, including the Internet channel for retail clients, handling customers in the office, mobile access to investment accounts, a DMA channel for institutional clients as well as tools for brokers and broker dealers,
- guaranteeing the lowest costs and best conditions for realizing orders – best execution and low latency,
- full internal and external STP, based on the automation of actions connected with submitting orders from the client side (various communications channels) and from the market side, as well as transaction handling: including reconciliation and calculations guaranteeing that the information flow occurs in real time,
- assuring a wide range of services that cover not only investment account handling and acting as a transaction intermediary, but also asset management and the distribution of investment products,
- accordance with the compliance requirements, set by MiFID and Basel II regulations.

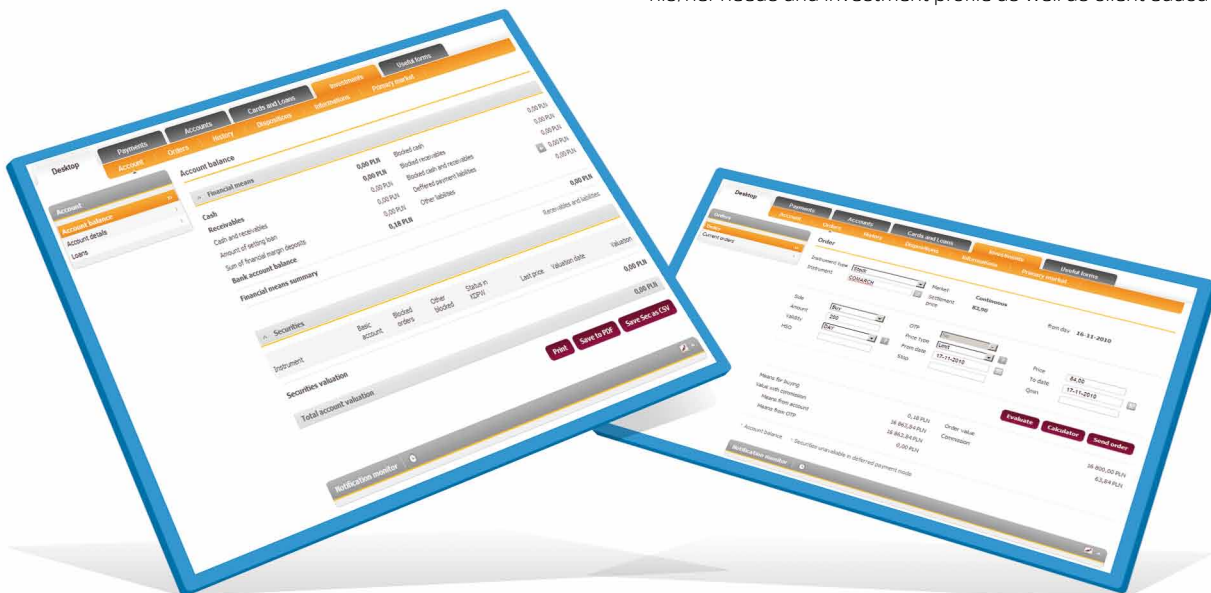
The speedy adaptation of our applications to changing market conditions is also especially important to us. We lay particular stress on the configurability of our solutions so that they can cope with the changes implemented by regulators and supervisory authorities as well as supporting brokers in the fast implementation of new products or services.

A short description of Comarch's solutions for brokerage houses has been presented below.

## Client handling and investment product sales

**Comarch CAFE Broker Application (CAFE)** - an integrated client advisor's work environment in the branch and a call center that covers client portfolio functionalities, the Comarch CRM modules chosen by the client and operational modules (IPO and orders handling, investment fund distribution), allowing the complex servicing of the broker's branch or advisor's work station in the scope of brokerage services, realized in WWW technology.

**Comarch Investment Advisor** - a system that supports wealth management and investment advisory services, it examines client needs and predispositions as well as proposing the best investment strategy. The system fulfills the requirements of financial institutions with regards to bettering communication with the client, an enhanced understanding of his/her needs and investment profile as well as client educa-



tion geared toward building long-term relations with the investment company. It also allows the client to increase their understanding of the principals that govern investment and the risk connected with it. Comarch Investment Advisor is based on the CAFE CRM system, which has been expanded to include a client responsibility and adequacy examination module required by MiFID, investment profile analysis tools and the building of investment strategies.

**Comarch Client Investment Reporting** - a solution that allows the brokerage house to build a competitive advantage through the generation of high class reports, which present among others the value, profitability and clients' portfolio risk (account risk) based on investment funds, securities and other financial instruments. It is the optimal method for linking the process of managing large amounts of data with the design, generation, publication and distribution of reports in accord with the policy of the given institution.

**Comarch Contact Center** - a strategic contact point for integrating all communication channels with the customer. This covers the telephone, including direct communication, voicemail and SMS options, as well as facsimile, email and the Internet. By building strong customer relationships this solution makes a company more competitive. Comarch Contact Center is a modern, modular platform that is easy to expand. It supports all

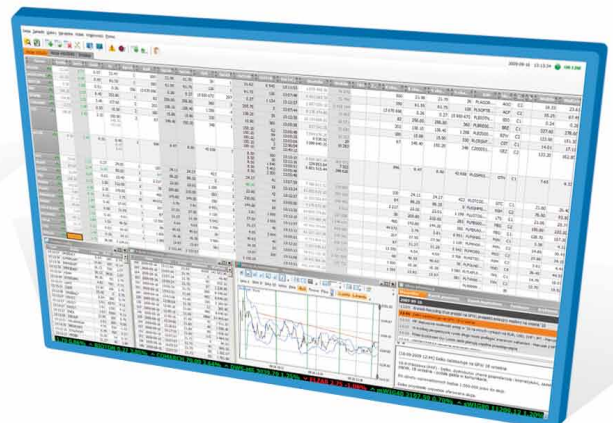
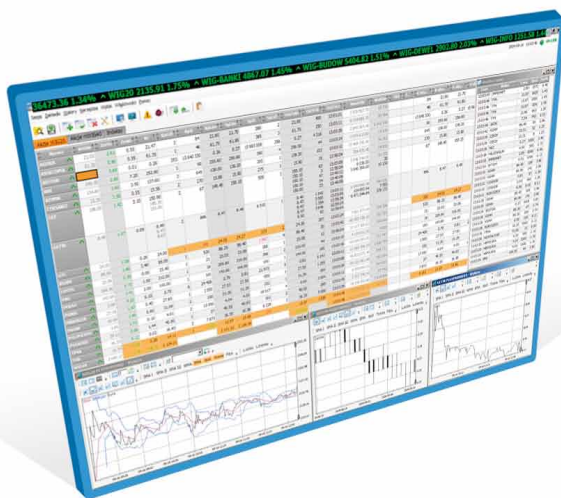
forms of communication and provides an automatic IVR (Interactive Voice Response) service along with agent support.

## Self-service applications for clients

**Comarch Internet Investments** - guarantee the handling of broker accounts as well as financial investment services via the Internet and through other electronic distribution channels for brokerage house clients. The system, which has been continually developed since 1998, offers the richest functionality on the market in terms of access to the brokerage account, primary and secondary market operations, financial operations as well as the remaining financial products offered by the broker.

**Comarch Online Trading (NOL3)** - a tool, which allows access to up to date Stock Exchange listings and market information, market analysis as well as individual stocks. It also realizes tasks typical for Order Management System (OMS) solutions such as making orders directly from the listings table and sending them to the market at the right moment.

**Comarch Mobile Investments** - is an innovative solution dedicated to clients of brokerage houses that need unrestricted access to their brokerage accounts. The platform supports both passive access (e.g., viewing the list of transactions, access





to current stock quotes), as well as active access, for example, the possibility of submitting orders.

## Transactional, calculation and investment systems

**Comarch eXchange Trading** - a central broker system characterized by highly efficient order processing, a flexible and multi-currency accounting module, effective communication with markets and brokers based on the FIX protocol, as well as the full servicing of client data, accounts, calculations, deposits, securities, corporate shares and communication (based on the SWIFT standard) with deposits and clearing institutions. The specific nature of CXT is based on dividing the registry and transactional part of the system, which guarantees the fulfillment of high expectations in terms of best-execution, utilizing the algorithmic engine and providing access to DMA services for office clients.

**Comarch ESDK+** - handles two-way messages between the National Depository for Securities, the participant and back-office systems (communications module). This allows the preparation and basic management of settlement instructions in the XML format, in accord with ISO15022 and ISO20022 norms (edit module).

**Comarch OMS** - a transactional application for brokers and dealers who handle the institutional clients' orders and activi-

ties carried out by the broker. The application guarantees access to current exchange listings, an analysis of instruments, immediate order submittal, handling the broker's discretions as well as orders left to the broker's disposition, carrying out functions connected with market making and arbitrage transactions. The system uses an algorithmic engine of Comarch eXchange Trading.

**Comarch Asset Management** - the system is geared toward asset management companies as well as brokerage houses that deal with investment activity and portfolio handling. Among others, the system guarantees the modeling of portfolios, handling tasks, access to the current portfolio structure, a control of investment limits, a valuation of portfolio assets, the reporting and measurement of risk and performance.

**Comarch Risk Management** - a system which manages investment-credit portfolio risk. It automates the processes of risk control geared toward limiting the influence of risk factor fluctuations on business activity. It also identifies the possible usage of the fluctuations for investment purposes.

**Comarch Performance & Attribution** - the system actively measures the effectiveness of investment portfolios, calculates effectiveness indicators with regards to benchmarks and risk, and carries out an attribution analysis as well as reporting of investment results.





# Managing information and processes



**Comarch Business Process Management** - a modern tool geared toward modeling and managing business processes in every institution. At the same time it is an integrating platform based on a mature and flexible architecture, which allows the integration of many scattered applications, such as transactional systems, CRM, Contact Center, data warehouses or document archives.

**Comarch Document Management System** - a solution which supports the management and flow of documents in the company. The system allows the management of document images (scanned paper documents) as well as electronic documents (e.g. text files, emails). Processes that handle documents can be managed with the help of the Comarch Business Process Management system or an internal, simplified workflow service.

**Comarch Content Management System** - a solution geared toward managing the content and structure of the portal for broker clients. Comarch CMS gives the client significant freedom to act, at the same time guaranteeing full control over the presented content and a high level of security. The most important information made available by CMS covers press agency messages, information about corporate shares, company results publications, shareholder information, the listing history or recommendations made by brokerage houses.

**Comarch Business Intelligence** - a modern IT solution based on data warehouse technology. Its underlying function is the delivery of ordered and comprehensible information which supports decision making on various levels of the investment company. Comarch Business Intelligence allows the choice and application of various areas of analysis depending on user needs, e.g. sales, finance, controlling and others.

## Security Solutions

**Comarch Security Access Manager DRACO** - a tool that allows the centralized management of user identity and of access to the company's resources.

**Comarch CentralLog** - a complex solution used to manage information about security generated by the company's IT in-

frastructure. It contains tools used to centralize, analyze and archive audit information generated by various systems and applications connected with security as well as independent information (e.g. database).

**Comarch MobileID** - a new authentication and authorization method, based on mobile phone technology. It links characteristics, which have so far not been combined, in one solution. They include confidence, easy usability, low cost and technological advances. The system is a separate product, but it is easily integrated with the Comarch Security Access Manager DRACO.

**Comarch MobilePKI** - a solution which supports authentication and authorization when using mobile technology. It allows use of the whole public key infrastructure (PKI) on mobile phones using the SIM card.

**Comarch SecureAdmin** - a system that monitors user activity in a clear manner using the web (passive and active analysis). Implementation of the Comarch SecureAdmin system does not require the modification or reconfiguration of existing applications and systems and its presence is not visible to users.

**System Comarch SOPEL (electronic signature handling system)** - complete implementation of a secure device used to verify a qualified electronic signature as well as securing software used to make the signature; in compliance with the law on electronic signatures.

**Comarch SafeDesktop** - a tool which secures the work station of the IT system's end users. The solution allows them to gain various functionalities using micro processing cards and USB tokens in heterogeneous environments. These include MS Windows 98SE/Me/2000/XP/2003/Vista/7 and Linux platforms.

**Comarch SmartCard** - a cryptographic micro processing card based on Java technology, used to safely store sensitive information such as cryptographic keys or passwords.

**Comarch Smart Token** - a solution whose hardware is based on USB tokens which link the characteristics of a cryptographic micro processing card and card reader on a single devi-



ce. The programming part and the internal software of the token were designed by Comarch.

**Comarch SmartCard Workshop** - a solution used to manage the life cycle of cryptographic cards and tokens. Apart from its basic functionality that realizes the workflow process, as well as reporting the up-to-date status of individual cards allocated by the system, it allows a full integration with the Comarch Certificate Authority.

**Comarch CertificateAuthority** - Comarch's own software, which allows the complete implementation of a system based on the Public Key Infrastructure (PKI), which consists of the allocation of certificates that secure the post, WWW servers and communications channels as well as the authentication and authorization of users. Comarch CertificateAuthority services the certificate during its whole life cycle - from the moment that a proposal is submitted until it runs out or becomes void.

**Comarch Security Content Management** - a complex solution for Internet providers. The system helps in building a competitive advantage by widening the offer by a series of security options as well as widening content and connection control.

## Consulting and turnkey systems

Comarch provides complex consulting services, including an analysis of integration needs and business processes, IT solution recommendations, the creation of functional specifications and a project for the implementation of an integrating platform. Comarch consultants have a deep knowledge of the sector which allows them to carry out effective analysis and to design the flow of business processes inside the company as well as during communication with business partners. Apart from delivering and implementing standard products, Comarch is always ready to fulfill the individual needs of its clients.

## Poland

### Comarch Headquarter

Al. Jana Pawła II 39A  
31-864 Kraków  
fax: +48 12 64 61 100  
email: [finance@comarch.com](mailto:finance@comarch.com)  
phone: +48 12 64 61 000

## Finland

### Comarch

Technopolis Business Park  
Innopoli II  
Tekniikantie 14  
02150 Espoo  
email: [nordic@comarch.com](mailto:nordic@comarch.com)  
phone: +358 50 50 191 50

## France

### Comarch Software SARL

19 Avenue LeCorbusier  
59000 Lille  
fax: +33 3 59 56 06 01  
email: [lille@comarch.com](mailto:lille@comarch.com)  
phone: +33 6 59 56 06 84

## Austria

### Comarch Solutions GmbH

Nußdorfer Lände 23  
A-1190 Wien  
fax: +43 1 91066 66  
email: [finanzen@comarch.at](mailto:finanzen@comarch.at)  
phone: +43 1 91066 00

## Switzerland

### Comarch Swiss AG

Bahnhofstrasse 21  
9471 Buchs  
fax: +41 81 755 55 01  
email: [finance@comarch.ch](mailto:finance@comarch.ch)  
phone: +41 81 755 55 00

## Russia

### Comarch 000

4th Lesnoy Pereulok  
office room: 438, 4103  
125047 Moscow  
email: [finance@comarch.ru](mailto:finance@comarch.ru)  
phone: +7 495 225 85 85

## Germany

### Comarch AG

Lyoner Str. 20, 60528  
Frankfurt/Main  
fax: +49 69 478 69 27 00  
email: [info@comarch.de](mailto:info@comarch.de)  
phone: +49 69 962 37 62 00

## Belgium

### Comarch AG

Avenue Louise 65  
B-1050 Brussels  
fax: +32 2 535 77 00  
email: [benelux@comarch.com](mailto:benelux@comarch.com)  
phone: +32 2 535 78 69

## Ukraine

### LLC ComArch

18/7 Kutuzova Str.  
01133 Kiev  
fax: +380 44 492 2843  
email: [finance@comarch.ru](mailto:finance@comarch.ru)  
phone: +380 44 492 2842

[www.finance.comarch.com](http://www.finance.comarch.com)

[www.comarch.com](http://www.comarch.com)

[www.comarch.pl](http://www.comarch.pl)

[www.comarch.de](http://www.comarch.de)

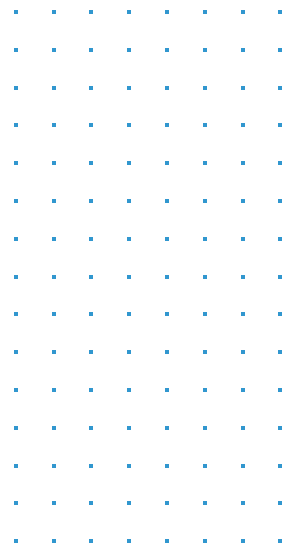
[www.comarch.ru](http://www.comarch.ru)

Comarch is a leading Central European IT business solutions provider specializing in forging business relationships that maximize customer profitability while optimizing business and operational processes. Comarch's primary advantage lies in the vast domain of knowledge accumulated in and applied to our software products. These products incorporate highly sophisticated IT solutions for businesses in all vertical sectors. Comarch has a multinational network of offices employing over 3300 highly-experienced IT specialists in Europe, the Middle East and the Americas.

Comarch Spółka Akcyjna with its registered seat in Kraków at Aleja Jana Pawła II 39A, entered in the National Court Register kept by the District Court for Kraków-Śródmieście in Kraków, the 11th Commercial Division of the National Court Register under no. KRS 000057567. The share capital amounts to 8.051.637,00 zł. The share capital was fully paid, NIP 677-00-65-406

Copyright © Comarch 2011. All Rights Reserved. No part of this document may be reproduced in any form without the prior written consent of Comarch. Comarch reserves the right to revise this document and to make changes in the content from time to time without notice. Comarch may make improvements and/or changes to the product(s) and/or programs described in this document any time. The trademarks and service marks of Comarch are the exclusive property of Comarch, and may not be used without permission. All other marks are the property of their respective owners.

EN 2011



**COMARCH**