



...about the Company

Cassa di Compensazione e Garanzia S.p.A. (CC&G) is a vital player in the Italian Stock Exchange system and in the Italian economy, too.

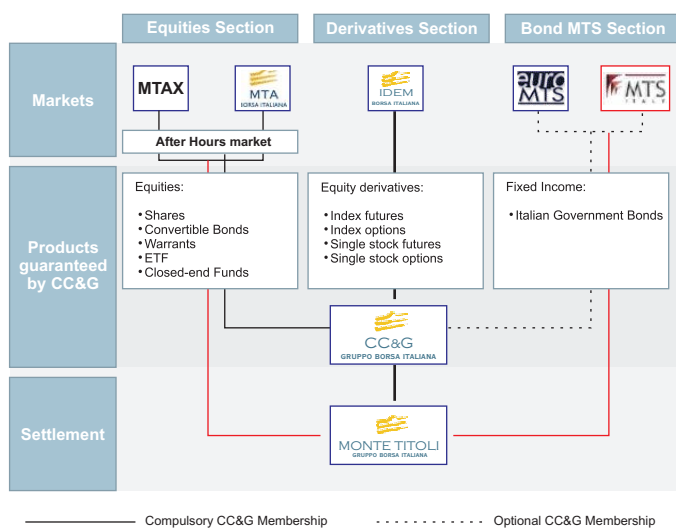
CC&G is the clearinghouse that keeps a detailed track of all trades, approves and guarantees exchanges, ensures that all obligations are met and eliminates any counterparty risks.

Tango/04 Keeps Risk at Bay in Italy's Stock Exchange

Cassa di Compensazione e Garanzia, the clearing and guarantee agency that regulates the trade of equities and Government bonds in Italian markets, uses Tango/04 Business Service Management solutions to assess operational risk in real time (no time gap between trade execution and novation) for transactions involving derivatives, cash equity and bonds, and also to ensure the accuracy of derivatives closing prices at the end of every day.

All transactions involving derivatives, cash equity and government bonds (only for CC&G members) that are conducted in the Italian Stock Exchange depend on CC&G's clearing and guarantee services.

CC&G manages the Central Counterparty Guarantee System (CCP) for the MTA, Trading After Hours, MTAX, TAHX and IDEM markets, regulated and managed by Borsa Italiana (Italy's Stock Exchange), and for the markets that are regulated and managed by MTS S.p.A, with exclusive reference to Italian Government Bonds.



CC&G's presence eliminates counterparty risk, becoming the guarantor of the final settlement of the contracts, acting as buyer towards each seller and as seller towards each buyer. In order to have these transactions guaranteed by CC&G in case of any trader's default (e.g. bankruptcy or insolvency), all traders must become members of CC&G and deposit a certain amount of

The Problem

CC&G's IT department must achieve 24/7 availability and top performance to protect the efficiency of the Italian stock markets.

The Solution

VISUAL Message Center

money as a guarantee. This amount, also known as risk margin, is calculated by a risk assessment system according to each trader's overall risk exposure. The amount of the required guarantee must be updated daily to prevent sharp variations in the market prices of a trader's portfolio from increasing its risk exposure.

"Now our IT team can focus at developing new applications for traders and investors. We have the ability to optimize our most business critical processes, to minimize downtime, and to improve our Service Levels and applications availability."

Cassa di Compensazione e Garanzia S.p.A. (CC&G) is part of the Italian Stock Exchange, Borsa Italiana. It organizes and manages the Italian stock market with the participation of nearly 140 domestic and international brokers, who operate in Italy or from abroad using a real-time electronic trading system. In addition, it performs organizational, commercial and promotional activities aimed at developing high value-added services for the financial community.

But financial transactions involving bonds, futures and derivatives are not all what CC&G must guarantee. Its Information & Communication Technology (I&CT) department must guarantee the availability and optimal performance of all its critical business services as well. Strict Service Level Agreements (SLAs) must be met to enable CC&G's real-time operations. If these goals are not achieved, the efficiency of the Italian Stock Exchange as a whole could be seriously affected. Several processes performed on a day-to-day basis enable CC&G to accurately manage the approval of transactions, calculate in real-time any change of the risk exposure of a trader, and demand additional guarantee funds if necessary.

These extremely complex and delicate operations required to provide CC&G's services must be completed within a precise time schedule every day. Any failure that can cause even a minimum delay could have serious consequences. As in any modern company, these operations are dependent on a series of critical processes that are carried out by the IT infrastructure and supervised by the I&CT department.

“Every day CC&G keeps track of thousands of transactions” says Mauro Fonzo, Head of Systems Management at CC&G. “Traders, banks and other economic players buy and sell on the CC&G guaranteed markets, so every single transaction must be tracked, guaranteed, cleared and communicated to the public.”

To perform its operations, CC&G relies on four IBM iSeries servers with a total of 11 logical partitions (LPARs) running multiple operating systems, applications and databases. Its high-availability production environment comprises two 825 production systems located in Milan and Rome. An additional 270 system located in Rome serves as back-up, while applications development tasks are performed on a 270 system located in Milan. Several Windows servers interoperate with the iSeries systems in order to allow traders to access the company's services using the Internet, VPNs and dedicated communication lines. The IBM Websphere application server supports several iSeries applications.

“When we chose VISUAL Message Center, our guess was that if it worked as promised, it could be a powerful tool in order to prevent operational risks and to meet Authorities requirements”

“Our IT department consists of few people, so we had a strong need to automate some of their tasks in order to focus the available resources at activities that are more strategic, like developing our own internal applications,” says Mr. Fonzo. “At the same time, we must meet SLAs as strict as the 2-second maximum response time that brokers expect from our novation execution in the derivatives market.”

CC&G asked Tango/04 Italy to help them monitor the most critical processes that are performed on a daily basis, with the goal of minimizing downtime and ensuring the operating health of the company's business services. These are real-time transaction clearing, creation and upload of the daily trading report, and distribution of the day's closing prices.

Real-time transaction clearing

In order to authorize and guarantee transactions, CC&G must receive notification of every trader. Downtime or a poor response time could delay transactions indefinitely, with the consequent loss of time, money and confidence from the market.

VISUAL Message Center alerts the I&CT department every time that the process exceeds the expected 2-second limit. VISUAL Message Center's enriched events and SMS/email alerts with escalation capabilities provide the operational risk manager and the IT operators with detailed information to accurately identify the cause of the problem and to accelerate its solution.

Daily trading report

At the end of the day, when most financial markets arrive to their closing, all the data about clearing transactions is consolidated and a final report is stored in a protected FTP area to make it available for the traders, banks and financial institutions. This report specifies the volume of titles exchanged and the clearing status for that given day. The consolidation of the complex data

generated by the daily trading depends on the proper completion of a series of jobs on the iSeries servers, and on the operational health of the FTP server. The I&CT department must make sure that all the jobs are executed correctly, while problems that may lead to downtime or low response time must be rapidly detected and corrected.

VISUAL Message Center makes sure that the consolidation process finishes within the expected time frame, checks the availability of FTP-related jobs, and confirms the existence of the report file in the FTP server. If the FTP is down or the FTP jobs are not running, it can automatically try to restart them. If the FTP cannot be restarted successfully, an SMS message is sent to the person responsible of solving the problem. Thanks to its powerful escalation capabilities, if an action is not taken in a given period of time, the warning message is sent again to another person, and it keeps escalating until someone handles the problem.

Distribution of day closing prices

Every day the press must be informed about the closing prices of exchanged equities and derivatives products. If any problem arises in the process, the delay must be communicated along with a new delivery deadline.

VISUAL Message Center monitors that all the jobs and processes involved in producing this information are correctly completed and sends an email to the risk management office.

“This is why we chose VISUAL Message Center,” says Mr. Fonzo. “Now that the monitoring and optimization of all our IT-related business processes rely securely on VISUAL Message Center, our IT team can focus most of their energies at developing new applications for traders and investors alike. We were expecting from a Business Service Management solution the ability to optimize out most business critical processes, to minimize downtime, and to help us improve our Service Levels and our applications availability.”

After using VISUAL Message Center for one year, CC&G can demonstrate to the management the increased stability of all its business processes. This has been achieved taking advantage of VISUAL Message Center's great ease of use, based on its simple, intuitive and customizable graphical interface, the SmartConsole, which does not require any complex training.

The business processes of CC&G have a vital impact on the Italian Stock Exchange and on the whole Italian financial community. VISUAL Message Center makes sure that these processes are constantly and proactively monitored and optimized, saving precious time, costs and making Italian investors sleep peacefully. *“When we chose VISUAL Message Center, our guess was that if it worked as promised, it could be a powerful tool in order to prevent operational risks and to meet Authorities requirements”* explains Fulvio Fabi, CC&G's I&CT manager.

VISUAL Message Center is a certified

IBM Server
Proven™
software solution