



## Société Générale leverages Informatica's data integration infrastructure for better risk management

### CHALLENGE

- Establishment of a data integration platform for the entire Société Générale Risks information system
- Priority deployment of the McDonough ratio calculation application to comply with Basel II

### INFORMATICA SOLUTION

- Management of exchange interfaces
- Reduced total cost of data integration
- Reuse of the technology, expertise, and processes
- Rapid development and maintenance, including recently trained resources
- Responsiveness to professional needs (numerous specification changes during the project)
- Ability to deliver new projects quickly

### ARCHITECTURE

- Data integration: Informatica
- Sources: Group branches' operations systems, Group reference systems
- Data warehouse and data marts: Oracle 9i
- Targets: calculation and analysis applications

“Through Informatica PowerCenter, we were able to build a shared and scalable data integration infrastructure making it possible to base all the “Risks” projects in Société Générale on common data. The sharing of development and the standardization of the processing chain — collection, processing, integration, and distribution of data — guarantee a quick delivery of the projects, whether they are mandated by law or driving decision making.”

– Bernard Périody, Risk Studies and Development Manager,

Corporate Information Systems Department

Société Générale is one of the leading financial services groups in the euro zone. The Group concentrates its activities around three major competencies: retail banking with networks serving more than 18 million customers, investment and financial banking, and asset management and investor services. At the end of 2004, Société Générale, with 93,000 employees operating in 80 countries, totaled €174.5 billion in outstanding deposits and €205 billion in outstanding credits.

### The Challenge

Basel II took effect in 2006 with the goal of promoting greater stability in the EU financial system. The Basil II accord uses a “three pillars” approach—minimum capital requirements, supervisory review, and market discipline. Financial institutions doing business in the EU are now required to balance their risk-to-capital ratio according to predefined standards. In response, financial institutions need accurate and complete visibility into their portfolio of risk.

In 2003, in order to ensure compliance with Basel II, Société Générale undertook a global initiative to establish a central system for the management of risk data. “Considering the stakes and the deadline, the Corporate Information Systems Department (CISD) could have undertaken Basel II as a separate project,” emphasized Bernard Périody, Studies and Development Manager for the Risk Department within the CISD. “Instead we saw the opportunity to build a common

architecture for all of the risk analysis applications, which would eliminate the problems and excess costs linked to a silo approach. We approached the project as the integration of all information systems from the risks channel, since the key to the global project was that all the applications use the same base of data.”

The creation of this platform would establish a data warehouse and common data services to provide upstream extraction, processing, and loading of data from existing Société Générale Group collectors as well as reference systems, and downstream distribution to the target applications—beginning with the Fermat software package chosen in November 2004 for the calculation of the new McDonough ratio from the Basel II regulation.

## The Selection Criteria

“The CISD had already chosen the Informatica PowerCenter data integration platform for other projects, for example in the domain of Human Resources and for the Group metropolitan accounting,” continued Bernard Périody. “In order to validate the applicability of this solution to the Basel II project, we contacted teams already operating PowerCenter, like the ALD Automotive subsidiary that uses it for processing data flows comparable to those we would need to implement. Their very positive feedback convinced us to launch the first step of the project very quickly.”

This first phase, launched at the beginning of 2005, involved the preconfiguration of the data warehouse (Oracle) and the construction of two data marts: one feeding the Basel II application and the other feeding the “Restitutions” project, a vast decisionmaking program which would provide visualization

of risk data along multiple axes through an intranet portal.

## A Scalable Device Based on Functional and Technical Sharing

Since the objective was to base all the risk projects on the same data and therefore eliminate divergent management rules, Bernard Périody and his team designed a shared workspace around Informatica PowerCenter comprised of several steps. The first step receives XML and flat files from source systems (community and client references, ratings databases, and operations systems for different branches) and translates them into Oracle tables. The second step provides a first modeling of the data with integrity verification, enrichment, and error correction. And the last step models the data for each client application (Fermat model for Basel II as well as other target-specific models).

The processes are stored in a common reference system but are executed by servers dedicated to each target application, which preserves the independence of the configuration and the launching of batch chains feeding the client applications. “The advantage of this model is its scalability,” Périody pointed out. “We can deploy new projects on this platform without interfering with the availability of the platform and can reuse earlier development.” The first challenge was “to juggle a time-constrained project (Basel II) and a major project from the Risk Department (Restitutions), without losing sight of the objective integration of the entire risks channel in three to five years. Further, since the quality and reliability of the source data are crucial, we dedicated a lot of time to defining the common data management rules.”

## Capitalizing on the Experience: a Center of Expertise in Integration

For the first phase, the team consisted of an internal staff of ten assisted by an expert from the service company Des Systèmes et Des Hommes. By the end of November 2005, the team had completed development related to Basel II and the Fermat application and entered the approval phase. For this first delivery, forty input flows (XML and flat files) and 15 output flows were developed. “The members of the team were trained on Informatica PowerCenter and got up to speed very quickly,” remarked Bernard Périody. “This made it possible for us to stick to the deadline, despite modifications to the specifications during the project. And without Informatica PowerCenter each change would have required us to begin again from zero without the ability to reuse the work already done. Because of the architecture established and the reuse of the components, the Fermat application will in fact be in production by the beginning of 2006.” The development of the Restitutions project continues and new projects are proliferating: application of risk analysis by country, internal calculation of capital needs, etc. “The Informatica platform made it possible for us not only to share the development and the data services but also to capitalize on the acquired expertise to deliver new projects with lower cost and in less time. Our integration logic for the Risks channel is now accompanied by a true ‘Center of Expertise in Integration’ which improves responsiveness and know-how and contributes to better management of risks for the entire Société Générale Group,” concluded Bernard Périody.

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The Data Integration Company™

Worldwide Headquarters, 100 Cardinal Way, Redwood City, CA 94063, USA  
phone: 650.385.5000 fax: 650.385.5500 toll-free in the US: 1.800.653.3871 [www.informatica.com](http://www.informatica.com)

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First Published: 2005

6766 (09/16/2008)