



A leading European investment bank

Overview

A leading European investment bank cuts intraday VaR calculation time from over 12 hours to less than one hour with TimeScape, increasing calculation accuracy and reducing regulatory capital levels.

Key Proof Points:

- **Faster time to market** with new investment strategies
- **Higher quality data**
- **Removal of risks** associated with manual manipulation of data
- **Flexibility to meet changing needs** as fund grows

"Risk management system implementation is a difficult area, with many clients being polarised between cumbersome, expensive enterprise risk solutions and error-prone spreadsheet-based VaR. TimeScape provides the data management and analysis framework to rapidly deliver VaR solutions that are ready for the increased data volumes of the future and the addition of any asset class. We are proud of our involvement in this project and see data management for risk as a key area of expertise for Xenomorph."

Brian Sentance,
CEO Xenomorph

Faster, Transparent VaR with Xenomorph

Data transparency and speed lead European bank to Xenomorph and intraday Value at Risk

THE PROBLEM

The bank's existing Value at Risk (VaR) systems were based around traditional RDBMS technology running on mid range Unix server hardware. Implementing a bivariate historical simulation VaR methodology, at the time of implementation the system involved just under 45,000 positions in around 28,000 equity derivatives with 7,000 underlying equity and equity index instruments.

Given the time-series and numeric nature of the problem being solved, the VaR system had gradually moved from being an overnight process running in several hours to a process that was taking over 12 hours to run and hence challenging the whole concept of it being run as an overnight batch. Additionally the system was producing over 70 million rows of output data per day, and risk managers did not have the tools to analyse and monitor such large datasets.

Data volumes in the system were set to expand further along with the expansion of the trading operation, and the bank required a solution that could be implemented quickly and deliver faster and more transparent VaR.

THE SOLUTION

The bank implemented historic VaR for its global equity and equity derivative operations based on Xenomorph's data management platform, TimeScape.

The project achieved regulatory approval just three months after the project's initiation. Due to the transparency and ease of access to instrument data, market data and calculations within TimeScape, regulatory capital requirements were also reduced as component risk calculations were investigated, better understood and improved upon. In addition, analytic add-ins allowed for enhanced tail analysis of VaR.

THE RESULT

The same VaR calculation implemented using TimeScape's XDB time-series database technology is now able to run in under an hour on utility server hardware, enabling fast and reliable end-of-day VaR. This calculation has been running in TimeScape for over a year without issue, delivering the reliability that regulatory reporting demands. Additionally, there has been no degradation in database performance as portfolio size has grown to around 90,000 positions involving 50,000 instruments and 12,000 underlyings.

The high performance and ease-of-use of TimeScape data management technology enabled risk managers to spend more time on doing more effective risk management and less time on manual data validation, comparison and cleansing, according to a senior risk manager at the bank.

"TimeScape XDB has enabled our VaR calculations to run far faster than we had experienced previously," he said. "Calculation accuracy has been improved due to increased data transparency, and the system was implemented quickly and has run reliably for over a year. We have had no issues reported despite the doubling of the number of positions in that time."

MORE INFORMATION

Xenomorph delivers data and analytics management solutions to the financial markets. Our TimeScape technology leverages our clients' proprietary expertise, enabling them to analyse and manage more data with greater control and transparency.

Our focus is to make our clients more successful by closing the productivity gaps between high performance database technology, data management and end-user data analysis. Through unified and transparent access to data and data analysis, our clients achieve even higher levels of financial innovation, business process efficiency and regulatory compliance.

Trading, research, risk, product control, IT and back-office staff use Xenomorph's TimeScape data management platform at investment banks, hedge funds and asset management institutions across the world's main financial centres.

Established in 1995, Xenomorph has offices in London, New York and Singapore.

For more information about Xenomorph:

Web: www.xenomorph.com

Email: info@xenomorph.com

London: +44 (0)20 7614 8600

New York: +1-212-401-7894

