

# Investment bank implements global end of day risk reporting

# **Background**

Following increasing pressures placed on the global banking industry post-2008, all banking organizations have had to improve the way they manage investment risk across their organizations.

This global investment bank provides wealth management, investment banking and asset management, and operates in over fifty countries. They needed to develop a sophisticated reporting mechanism for their endof-day risk reporting in order to better equip their risk officers with the information they needed. Their overriding aim was to provide a cen-tralised reporting dashboard that would act as the central source for all other related applications, and would provide tailored and personalized reporting.

The end-of-day system is used by market risk officers (MROs) and traders who both view the data at almost all levels of granularity.

# The challenge

One of the key challenges was the need to manipulate, process and report on huge volumes of data, expected to rise significantly as a result of increasing global online investment demands.

Due to new requirements, including multiple end-of-day reloads, the estimated data volume was expected to grow to 6 billion rows a day, resulting in an overall database size of up to 150 terabytes, with a 20TB data cube.

# Instant data availability

The MROs and traders needed immediate access to the aggregated end-of-day risk data in order to gain an accurate reading of the level of current investment risk. In

addition, staff in different regions wanted the ability to view data from markets which had already closed, and all data had to be available by 9:00 AM Central European Time (CET).

A central data repository processes the end-of-day data, allowing users to analyze performance, risk exposure, trading activity, and individual and group trader performance. The bank wanted to consume this data in preparation for aggregated reporting, for executive-level management reporting, and low-level book and trade reporting across the bank's fixed income and commodities data and, eventually, equities business areas.

The end-of-day reporting solution has proven highly scalable, handling 2 billion records per day – an increase of almost ten times the original volume.

### The solution

Following an assessment, the bank recognized their existing end-of-day risk reporting did not have the scalability to cater for the increase in data volumes that resulted from their expanding investment business.

After a successful proof of concept, Hitachi Consulting (formerly Information Management Group Ltd.) delivered a sophisticated en d-of-day risk system, with data being sourced from a wide range of risk management systems; data is uploaded into a central data repository regularly throughout the day. Once each market within each time zone has closed, risk information is calculated by the appropriate upstream system, and then loaded into the data repository.

The solution allows up to 260 risk measures to be read and analyzed. In addition, users can also browse the data while it is being pdated, ensuring that the data is made vailable as soon as possible.

# The benefits

The end-of-day reporting solution has proven highly scalable, handling 2 billion records per day – an increase of almost ten times the original 2010 volume of 200 million records per day – and the system holds 180 days worth of data.

The solution monitors over 260 chosen risk measures, and summary management reports are available globally and by region for instant use by local MROs, traders and executives as required.

### **Learn More**

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