

Best Infrastructure Initiative

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To stay competitive in an environment of large-scale change, including mergers and acquisitions activity and enterprise-wide consolidation, Bank of America Merrill Lynch (BAML) set an aggressive double-digit growth target for its foreign exchange (FX) business. The organization set this target to respond to increasing volatility and reclaim strength in the FX market. Due to the huge volumes and extremely tight latency targets characteristic of FX, the firm's IT team had to rapidly improve the scalability of its FX systems to meet the growth targets and mitigate associated risk.

The bank chose the Sumerian IQ service to address its FX needs, eschewing the standard routes of gathering intelligence internally from several siloed software tools or using IT or business management consultants. The firm deployed Sumerian IQ to capture low-level granular data from throughout its distributed IT environment and geographically dispersed servers, and create a complex and accurate model of the bank's systems, including its market data interfaces and risk management systems. BAML also used Sumerian to model correlations between quote and trade volumes, and server use and latency.

As a result of BAML's deployment of Sumerian IQ, the firm reduced latency by over 75 percent by identifying limiting components for end-to-end latency. It identified existing capacity bottlenecks and horizontally scaled existing applications, resulting in headroom growth from 11 to 30 percent without the need for any additional investment. It also discovered the trade footprint on each platform and quantified the existing operating capacity in terms of trades-per-minute, providing a crucial metric for the bank to measure against. Finally, BAML also implemented an action plan, which included re-architecting and redeveloping an FX application's key component, which was responsible for up to 95 percent of the overall latency.

The overall result of these advances in latency and scale is optimizing trading capacity for the firm. —*Michael Shashoua*



Gary Meyers, Bank of America Merrill Lynch, and Bob Reinhold, Ernst & Young

BANK OF AMERICA MERRILL LYNCH REACTION

“Bank of America continuously focuses on operational excellence to deliver innovative capabilities to our customers. With this project, our team was able to optimize our trading capacity in a very short period of time and significantly reduce end-to-end latency. It's great to be recognized for these types of results.”

—**Robert Grey, global director, application service delivery group, Bank of America Merrill Lynch**



JUDGE'S COMMENT: I'm impressed with Sumerian's work and proposition. Follow the numbers—this has delivered significant results already, and promises more to come.