

HOW SUN HUNG KAI MAKES PROGRESS



TRADING UP WITH PROGRESS

To better serve its customers, Hong Kong-based Sun Hun Kai Financial (SHKF) deploys the latest technology to enhance execution speed, increase capacity, deliver continuous system uptime and improve security. SHKF was one of the first local brokers to purchase a mainframe for trading and, in 2000, to offer Internet-based, straight-through order processing (at SHKFOnline.com).

Its next breakthrough came when Hong Kong Stock Exchange moved to a 3rd-generation, automated order matching and execution system (AMS/3). SHKF migrated all trading activities from its legacy mainframe to an IT infrastructure based on open technologies—with Progress® SonicMQ® as its reliable messaging backbone.

"The end goal was to create a single integrated platform that could run the business and was more customer-focused. The final phase of the reengineering work has just gone live, and we are happy with what we have achieved," says Carl Chan, Chief Technology Officer, Information Technology, SHKF.



CHALLENGE

Build an innovative IT infrastructure that accelerates execution, increases capacity, and improves security—to deliver seamless, high-quality customer service

SOLUTION

An open, flexible, scalable IT infrastructure that seamlessly integrates all applications, based on the Progress® SonicMQ® messaging platform

BENEFIT

Customer-focused messaging system underpins current operations and new business initiatives. Single integrated platform for the businesses and customers.

A RELIABLE INTEGRATION BACKBONE

Reengineering opened up new challenges and new opportunities. When the stock exchange moved to AMS/3, all brokers were required to build their own gateway. Such a gateway can be bolted onto an existing mainframe, but this is a difficult undertaking and poses scalability issues. SHKF elected to take the open systems route, as this provided for greater future flexibility. But after working with a mainframe for more than 30 years, this was a major undertaking involving lots of detailed planning and phased rollouts.

SHKF selected the Progress® SonicMQ® messaging platform for unifying the company's applications on its new servers because the company felt most comfortable with the messaging platform's capabilities. These would enable SHKF to better serve customers.

SonicMQ includes a unique Continuous Availability Architecture® that ensures maximum system uptime. It also eliminates the requirement for expensive RAID (redundant array of independent disks) hardware, OS clustering software or 3rd-party high-availability (HA) frameworks in the messaging layer. Sonic's Dynamic Routing Architecture and advanced clustering technologies are able to handle vast numbers of messages, users, and brokers—to process more orders faster

SonicMQ also offers a highly available, secure and reliable extension of the messaging backbone to SHKF's remote offices and business partners. Communications are transparently routed and load balanced across the brokers in the cluster, facilitating the fastest possible communication across the most effective path. The system's advanced distributed management and deployment infrastructure dramatically simplify operations and lower the total cost of ownership for business-critical communication across the enterprise.

Initially, SHKF used SonicMQ connect to the exchange's AMS/3 system. The futures and options side of the business was used as a pilot for the initial stages of the work, primarily because its smaller size made it easier to manage than the core equities trading operations, which were much larger and more complex. The end goal was to create a single integrated platform to run the business that, significantly, was also more customer-focused.

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Chief Technology Officer,
Information Technology, SHKF*

Today, SonicMQ acts as the core transport mechanism between all of the sub-systems that have been subsequently established. The new integrated platform is now used by more than 500 brokers and also handles all Internet trades by retail customers. The system also hosts an interactive voice response (IVR) platform for voice-driven commands. Aside from the underlying trading function the platform has extensive capabilities in various areas, including market models, trading methods, and market and investor access channels.

MORE TRADING, NEW INITIATIVES

SHKF's open technologies approach has paved the way for much greater trading volumes and enabled the integration of cash trades and futures onto a single trading system with almost unlimited scalability. Daily trading volumes peaked as high as HK\$180 billion (US\$23 bn) during 2007 in Hong Kong, and, while volumes have decreased in recent times, these volumes are expected to increase again as additional Chinese firms are listed on the Hong Kong Stock Exchange with the relaxation of cross-border restrictions.

The move to open technologies also allows SHKF to use the latest applications for business planning and management, unburdened by mainframe requirements. All applications run on a range of UNIX servers in the main data centre in its offices in Hong Kong with a failsafe backup at a different, secure location.

The new integrated platform also aims to support a range of business initiatives by SHKF. Key among these is the requirement for the platform to be more customer-focused with the messaging system underpinning all operations.

SHKF felt that it was important from a customer perspective to assign a single account number and for that number to be usable across many different services offered by the company. One of the great benefits of the reengineered system is that it retains a single account number for each customer to trade equities, unit trusts, futures and options.

The single account allows SHKF to implement data warehousing and business intelligence allowing for the launch of a number of cross-selling and

up-selling customer activities. The system also allows specialist software applications and systems to be utilised, including CRM, financials and HR-related applications.

SUN HUNG KAI FINANCIAL

With four decades of operating experience and industry-leading innovation, Sun Hung Kai Financial (SHKF) is Hong Kong's leading local non-bank financial institution. Its business spans wealth management and brokerage, asset management, corporate finance, consumer finance as well as principal investments. With approximately HK\$50 billion (US\$6.4 bn) of assets under management, custody and/or advice the company has an extensive branch and office network in over 60 locations in Hong Kong, Macau, China and Singapore.

The company was founded in 1969 and listed on the Hong Kong Stock Exchange in 1973 as Sun Hung Kai Securities (stock code: 86). Many milestones have been achieved over the last 40 years, particularly with regard to China. In 1991 for example, the company positioned itself as one of the first underwriters and approved overseas agents on the Shanghai and Shenzhen Stock Exchanges.

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PROGRESS SOFTWARE

Progress Software Corporation (NASDAQ: PRGS) provides application infrastructure software for the development, deployment, integration and management of business applications. Our goal is to maximize the benefits of information technology while minimizing its complexity and total cost of ownership.

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