

# GO-Business turbocharges government trade e-document workflow service with IBM OpenPower Linux server



Daniel Ma, Technical Services Director (left) and Allen Lee, Ge-TS Product Director of GO-Business (right).

expired but we were the only one that was deemed to be suitable,” said Allen Lee, Ge-TS Product Director at GO-Business. “Even so, we were pleasantly surprised by the rate at which we were able to win over customers and drive up transaction volume during our first year of operations.”

The Ge-TS system was brought to production on an IBM pSeries AIX Unix server running DB2 Universal Database but was developed by GO-Business to leverage open standards in order to ensure application portability. It also has a “componentised” architecture that enables different elements of the system to run on separate servers.

## Overview

### ■ The Challenge

GO-Business planned to migrate the front-end components of the Ge-TS, the Government Electronic Trading Services system, to a new platform while keeping the back-end on the existing pSeries AIX machine.

### ■ The Solution

GO-Business retained DB2 as the database engine while switching to the open source Linux operating system on the IBM eServer OpenPower 720 system.

### ■ The Benefits

The high-performance OpenPower 720 enabled GO-Business to comfortably accommodate processor-intensive enhancements to Ge-TS as well as deliver faster response times. These improvements in customers' on-line experience helped GO-Business more than double the number of SMEs using web-based access to Ge-TS in just a few months.

Entering a newly deregulated market to compete against a monopoly service provider is a significant undertaking and in many industries it takes years for the new players to assert themselves. In the space of 18 months, however, Global e-Business Services Ltd ('GO-Business') has been able to win significant market share with the help of service innovations powered IBM's Linux-optimised OpenPower server and DB2 Universal Database for Linux.

A subsidiary of Hong Kong-listed Computer and Technologies Holdings Group (SEHK: 0046), GO-Business operates 'Ge-TS 商貿易', one of two service providers licensed by the Hong Kong SAR Government to provide Government Electronic Trading Services to the trading community.

“We were one of the companies that tendered to become new providers of Government Electronic Trading Services when the exclusive franchise

“Our plan was to migrate the front-end components of the Ge-TS system to a new platform while keeping the back-end on the existing pSeries AIX machine,” said Daniel Ma, Technical Services Director of GO-Business.

“So when we started to think about a new platform to host the front-end components, we actually had plenty of choices. We could change the hardware architecture, the operating system and even the database system, although the third option would require some software porting effort.”

At an early stage in the evaluation process, Ma made a decision to retain DB2 as the database engine while switching to the open source Linux operating system. Two years after development of Ge-TS system was initiated, Ma felt that Linux was robust and stable enough to run mission-critical applications.

“We've tracked Linux as it has matured and were more than satisfied with

the performance of the Red Hat Enterprise Server distribution. The fact that it was fully supported by top-tier vendors like IBM, should we need to call for technical assistance, was also reassuring," he said.

That still left the question of what hardware to adopt for the new Ge-TS platform with DB2 on Red Hat Linux, 32-bit and 64-bit x86, Itanium, PowerPC and even mainframe architectures were all potential options.

"Although we could have acquired an x86-based system for less, we were prepared to pay more for a new IBM OpenPower System. The IBM POWER5 processor is very powerful and the system as a whole has excellent reliability, availability and serviceability features that should deliver dependable high-performance over the long term. Being able to acquire the server, OS and database system in one package, with a single point of support was also a benefit," said Ma.

The IBM eServer OpenPower 720 System installed by GO-Business is configured with a single POWER5 processor but provides approximately five times the processing throughput of the existing pSeries server. The OpenPower 720 also offers plenty of headroom since it can be configured with up to four POWER5 processors.

According to Ma the migration of Ge-TS front-end components was very straightforward. After three weeks of

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planning and preparation – supported by IBM – actual migration took place over a weekend. Some performance tuning was required to take advantage of the new hardware but the real benefit has come from being able to accommodate processor-intensive enhancements to the Ge-TS front-end application.

"We've built new functionality into the front-end – such as submission guarantees with three-way confirmation, web-based management reports and total customer data management – that are a real value-added benefit to our customers. We now offer a performance guarantee to our small-to-medium enterprises customers, which is something very few internet applications on the market can provide," said Lee.

The performance guarantee has been a significant factor in the growth of the Ge-TS SME customer base. During the first six months of 2005, GO-Business saw the number in SME Hong Kong and China using web-based access to Ge-TS jump by more than 110 per cent. Ge-TS has also started providing these companies with additional services such as a business portal, document management and workflow applications.

It now takes about three times as much processing power to drive the front-end application but, according to Ma, the OpenPower 720 has hardly been stressed by the increased workload.

"Six months after we went live with OpenPower system, it is running at about 15 per cent of capacity while delivering faster on-line response time and batch processing time than the previous platform," he said.

Beyond GO-Business and its customer base, the success of the IBM OpenPower-based Ge-TS front-end system has been recognised in the wider community. In July 2005, GO-Business received a Linux Business Merit Award under the Infrastructure Building and Communication Application Category at the Linux Business Awards, organised by

the Office of the Government Chief Information Officer in collaboration with Hong Kong IT industry.

"We are naturally delighted that our move to Linux on the IBM OpenPower platform is paying off so well," said Ma. "These new technologies have really proven themselves and now represent the strategic IT platform to propel our growth for GO-Business as we move forward."



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