Shenzhen Development Bank

As part of a program of server virtualization and consolidation, SDB deployed 18 instances of SUSE® Linux Enterprise Server. Taking advantage of the built-in Xen virtualization technology, the bank achieved a five-to-one consolidation ratio of physical servers to virtual servers. It also reduced energy consumption in the data center by 20 to 30 percent.

Overview
Shenzhen Development Bank Co., Ltd (SDB) was the first bank listed on the Shenzhen Stock Exchange in China, in 1987. The bank has since grown to encompass a network of more than 300 branches in 20 major cities throughout China, with a further 600 correspondent banks globally. Employing 10,000 people, SDB provides a broad range of financial services to private individuals and businesses.

Challenge
SDB wanted to make its IT infrastructure more efficient and easier to manage. The company was operating numerous Intel processor-based servers running Microsoft Windows to support a variety of applications, including anti-fraud systems and internal settlement systems.

Solution
As part of a broader program of server consolidation, SDB opted to deploy SUSE Linux Enterprise Server, using the built-in Xen virtualization technology to enable extremely efficient utilization of its hardware.

“With Xen virtualization as an integral part of SUSE Linux Enterprise Server, we have a highly manageable platform that is also very cost-effective.”

HUA JIANG
Systems Engineer
Shenzhen Development Bank Co., Ltd

The cost of licensing, maintaining and managing multiple physical servers was relatively high, and SDB was also experiencing some issues with stability. As the bank continued to grow, it would need to keep adding new physical servers—so the issues were likely to get worse over time.

To reduce its capital and operational costs from IT, to enable greater scalability and to improve stability, SDB decided to virtualize and consolidate its infrastructure. Where possible, the bank also planned to migrate applications away from Microsoft Windows—again, to reduce costs and instability.

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Results
+ Achieved a five-to-one consolidation ratio of physical servers to virtual servers
+ Reduced energy consumption in the data center by 20 to 30 percent
+ Improved stability and availability of services
“Our technical staff found the SUSE training to be highly effective, and quickly became competent administrators of SUSE Linux Enterprise Server. For the broader business, the introduction of the SUSE solution has meant reduced costs together with improved service availability and stability.”

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Systems Engineer
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Results
The server virtualization and consolidation program has enabled SDB to make a significant reduction in the total number of physical servers it owns and runs. The consolidation ratio achieved by the bank is approximately five to one. This not only means future savings in purchasing server hardware, but also ongoing savings in power and cooling in the data center.

“As a result of server virtualization, we have reduced energy consumption in our data center by 20 to 30 percent, with a corresponding reduction in costs,” said Jiang. “SUSE Linux Enterprise Server with Xen virtualization is a key contributor to those savings.”

Introducing a new operating system can be a major step, requiring training for technical staff. For SDB, one attractive feature of SUSE Linux Enterprise Server was the extensive service and support network provided by SUSE and the broader user community. In addition to community support forums, the bank has access to high-quality telephone support from SUSE in China, with on-site support also available at short notice.

“The service from SUSE is excellent: we can always find the help we need,” said Jiang. “Our technical staff found the SUSE training to be highly effective, and quickly become competent administrators of SUSE Linux Enterprise Server. For the broader business, the introduction of the SUSE technology has meant reduced costs together with improved service availability and stability.”