Mizuho Bank, Ltd. transforms online and mobile banking systems

IBM z Systems technology running a Linux operating system helps bank reduce operating costs

Overview

The need
Mizuho Bank, Ltd.'s aging system lacked the flexibility and support necessary to meet its goals of delivering an improved customer experience through its services and enhancing business continuity while decreasing IT costs.

The solution
Designed for continuity and scalability, IBM® z Systems™ technology running a Linux operating system and an IBM® DB2® data server provided the foundation Mizuho needed for its Linux environment to develop and deploy new services faster and more reliably.

The benefit
Mizuho updated online and mobile applications, keeping user satisfaction high and expanding its online presence by gaining scalability and sustainability while reducing overall costs.

Established in 2002 and headquartered in Tokyo, Mizuho Bank, Ltd. is a leading bank with more than 500 branches and 11,000 ATMs in every prefecture of Japan. Mizuho services over 26 million households with products that include everyday banking, trusts, and securities.

Transforming ways of doing business
Mizuho had been operating on an aging Internet banking system that could not provide the flexibility or diversity required to meet its goals of promoting "One Mizuho" group, which is an effort to deliver seamless products and services to individual customers, including banking, trusts and securities, and to improve the funds supply function to corporate customers. The bank wanted to make better use of advanced risk-management capabilities and offer industry knowledge to help develop new products and offerings and expand to non-Japanese overseas customers.

IBM z Systems technology running a Linux operating system and an IBM DB2 data server helps Mizuho provide reliable and visionary services. "We now deliver innovative financial services and avoid, or instantly recover from, system failures, promoting business continuity and increasing customer satisfaction," says Masahiko Kato, division head of IT and system general division 1 at Mizuho.

Another priority for Mizuho was establishing a platform that provided stability and continuity while creating new, innovative Internet and mobile services at a low cost and within a short development and deployment window. The bank's Mizuho Direct solution provides customer functions including balance confirmations, transaction detail, money and savings transfer capabilities, and transaction result confirmations. With ever-increasing customer usage, currently at 10 million users and growing, Masahiko Kato, division head of IT and system general division 1 at Mizuho, says: "Smartphone usage has been very high in recent years, reaching around 30 percent of our customer base. We have modified our systems several times to support the increases and additional services, but we still need to speed up development as customers desire more and more innovation and access to banking services."

Platform for reliability and recovery

Mizuho updated its infrastructure and later chose to refresh it with IBM technology. The IBM team worked with the bank to design and build a new solution that combines IBM zEnterprise® EC12, SUSE Linux Enterprise Server for System z® and IBM DB2® High-Availability Disaster Recovery solutions. Along with IBM, the bank initialized a global support system to deploy the relational database management system (RDBMS), and specialists from Canada and Germany came to Japan to provide comprehensive support for the DB2 and Linux solutions during launch.

IBM z Systems technology provides the scalability and stability Mizuho needs to run an active-active system for its Linux environment at half the cost and deliver business continuity for its customers. The capacity on-demand option helps Mizuho continue running even if a system failure occurs by activating the standby processors that are integrated into the IBM z Systems solution. "The adopted configuration is unprecedented," says Yasumasa Mukai, managing director at Mizuho Information & Research Institute, Inc. (I&R). "The inclusion of a DB2 data server and IBM InfoSphere® Data Replication [Q Replication] software provides high failure tolerance, improving business continuity in the event of disaster, with the DB2 data server speeding up recovery when necessary while the active-active configuration enables the main and backup systems to operate constantly, helping the company avoid costly downtime."

Solution Components

Software
- IBM® DB2® High-Availability Disaster Recovery
- IBM InfoSphere® Data Replication (Q Replication)

Systems
- IBM z Systems™ running Linux
- SUSE Linux Enterprise Server for System z®
- IBM zEnterprise® EC12
- IBM DB2® for Linux

With 70 percent of applications being rebuilt and almost all back-office customer service and membership registration applications being redeveloped, minimizing risk around development was crucial. Improving usability, centralizing maintenance and facilitating business store deployment for future use were other key initiatives in Mizuho's plan. Youji Chuujou, division manager for the payment and channel system division of Mizuho I&R, says: "IBM provided various tools to minimize the risk of rebuilding applications. For example, there are tools to help create specifications based on old system programs and tools to check the differences between test results in the old versus new programs, which help eliminate the differences between the old and new system functions. By utilizing these tools, we can develop high-quality programs in a shorter time period."

Scalability supporting growth

Mizuho gained a solution that acts not only as a payment system but also as omni-channel marketing. The bank can collect and analyze customer operating information to use in developing new products and services, helping accelerate delivery to customers. With Internet access increasing by almost 100 percent each year and corporate Internet and telephone banking initiatives on the rise, the bank needs immediate access to increased capacity whenever spikes in usage occur. "The active-active system using both the production system and remote disaster recovery system is effective for dealing with drastic spikes in transactions and can also activate the backup central processing unit for unexpected situations," says Kato.

Mizuho takes banking into the future for its 10 million plus customers with innovative IBM z Systems technology running a Linux operating system and a DB2 data server. Designed for reliability, the solution helps the bank improve the customer experience, reducing IT expenses along the way.

For more information

To learn more about IBM z Systems technology running a Linux operating system, please contact your IBM marketing representative or IBM Business Partner, or visit the following website:
ibm.com/systems/z

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