

## client needs:

- a server platform to accommodate expanding data volume
- cost-efficient solution that would not sacrifice reliability or performance
- strengthened infrastructure and enhanced customer service

## client results:

- By migrating its ASP system from UNIX-based servers to a Linux cluster running on an HP server platform, Dai-ichi Kangyo Bank Information Systems (DKIS) gained superior redundancy and improved performance on half the budget.
- DKIS reduced total cost of ownership and gained reliability and stability equal to its previous UNIX operating environment.
- HP ProLiant DL380 Packaged Clusters enable seamless scaling, computing capacity expansion and maintenance – with minimal downtime and impact to users.
- The HP ProLiant clustered configuration protected by SteelEye's LifeKeeper high-availability software meets DKIS needs for maximum application and data uptime.

## what makes it work:

### hardware:

- HP ProLiant DL380 Packaged Cluster – two ProLiant DL380 2P Intel® Pentium® III servers configured into a cluster, sharing a single HP Smart Array Cluster Storage system with up to 1TB of shared SCSI storage

### software:

- SteelEye LifeKeeper for Linux cluster software, with Oracle Application Recovery Kit
- Oracle8i database application

### hp services:

- consultation, design and testing
- technical support

## success story



## Dai-ichi Kangyo Bank Information Systems (DKIS)

“Running on HP ProLiant Packaged Cluster servers with SteelEye LifeKeeper, our ASP system has achieved superior redundancy and reliability while minimizing our investment. It will enable us to create new services.”

– Hitoyoshi Toda,  
Director and General Manager,  
Planning Division, Dai-ichi Kangyo  
Bank Information Systems

Dai-ichi Kangyo Bank Information Systems aimed to fortify its infrastructure and enhance customer services. These objectives led the organization to migrate an application-service-provider system to Linux on an HP ProLiant server platform with SteelEye LifeKeeper high-availability clustering. The move improved redundancy and performance – at half the cost of another vendor's servers. “With the HP ProLiant server cluster, maintenance-related advantages will be significant in the future.”

– Hitoyoshi Toda



© Copyright 2003 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. Intel and Pentium are registered trademarks of the Intel Corporation or its subsidiaries in the United States and other countries.

For more information on how working with HP can benefit you, contact your local HP service representative, or visit us through the Internet at our World Wide Web address: <http://www.hp.com>.



## like money in the bank: ASP cuts costs by migrating to Linux on hp adaptive infrastructure

Since April 1993, Dai-Ichi Kangyo Bank Information Systems (DKIS) has provided comprehensive computing support such as consultation, integration and operation, software development, data entry, hardware/software sales, network/system construction and management. Four years after its establishment in Bunkyo-ku, Tokyo, DKIS launched a full-scale Internet service called Heartweb to meet individual corporate needs.

The company also concentrates on application-service-provider (ASP) offerings, including database space rental and split rental service for shared databases. The unique rental-service application reduces installation costs for user companies because DKIS can construct and expand the application as data grows and business conditions change – without client companies having to worry about operator capacity. The ASP also installs dedicated servers for clients and supplies server housing and hosting through its “Application Pro” operations. In addition, “Application Light” services provide shared-server space rental and connections using dedicated or dial-up lines.

“With tougher competition in the ASP business following the market’s rapid expansion, we needed to demonstrate higher levels of superiority in the areas of performance, reliability and cost – and to return these benefits to the customers,” says Hitoyoshi Toda, director and general manager of DKIS Planning Division. “The major issue was how to realize those factors at a low cost. The former ASP system had been in use since the company’s establishment, so we expect to reach peak capacity as the dependence on

information technology (IT) rapidly increases, data volume grows and the number of customers expands.”

### strengthening the foundation enhances customer services

Individual, UNIX-based servers supported the previous system. Along with limited storage capacity, DKIS management was concerned about redundancy, stability and expandability due to ever-increasing data volume. DKIS also wanted to retain the sturdiness and reliability of the UNIX operating environment. These objectives led to a decision to use the Oracle8i database application and the Linux operating system with HP ProLiant servers.

In early summer 2001, DKIS sought software proposals from hardware manufacturers it had dealt with previously to realize a superior cluster on Linux; however, it was difficult to find a product demonstrating good price/performance. Then, the DKIS staff learned of LifeKeeper for Linux cluster software produced by HP partner SteelEye Technology. The staff later visited the LinuxWorld Conference & Expo 2001, where they saw the HP demonstration of Linux running on the HP ProLiant DL380 Packaged Cluster. They evaluated the server’s availability, functionality and fail-over capabilities in a clustered environment – and also noted that HP had a wealth of experience running Linux on a ProLiant server platform.

“From the outset, we wanted to achieve the same level of reliability and performance as the UNIX-based cluster configuration, but at half the cost,” explains Yuichi Adachi, general manager of DKIS e-Business Division. “The verification results that Japan Business Systems (JBS) carried out, in cooperation with HP and Oracle, perfectly met those requirements. What’s more, the ease of using SteelEye’s LifeKeeper for Oracle Application Recovery Kit makes future system expansions simple. Clearly defined labor requirements and costs made it more attractive. We quickly decided to install the solution.”

### shifting to high reliability at half the cost

While the strongest combination, the Linux/Oracle/SteelEye/ProLiant cluster configuration presented a difficult challenge. However, the successful collaboration and cooperation of HP, JBS and Oracle enabled a smooth installation. In November 2001, DKIS updated its ASP system, reducing its total cost of ownership, and gaining reliability equal to UNIX on half the budget. DKIS is the first user of LifeKeeper for Linux in Japan.

“This clustered HP ProLiant server arrangement was built without complication or wasted time so we could install it smoothly.”

– Takuya Tsukakoshi,  
eBusiness Division,  
Dai-Ichi Kangyo Bank  
Information Systems

HP Services configured the ProLiant DL380 Packaged Cluster for an Internet data center (IDC) with a shared SCSI RAID subsystem efficiently integrated with two clustered servers – a design which produces easy installation, anywhere operation and superior system availability. The configuration also delivered significant advantages in terms of installation costs and load balancing.

In DKIS’ current business environment, speed is critically important in building competent resources. Quick set-up and start-up were possible this time as well. Additionally, since LifeKeeper for Linux doesn’t require system-integration processes, such as large-scale configuration and customization, the DKIS staff was able to clarify all costs at every stage.

“This clustered HP ProLiant server arrangement was built without complication or wasted time so we could install it smoothly,” says Takuya Tsukakoshi of the eBusiness Division. “As the overall system acts in harmony, it operates like one server, which is another attractive point. From the initial stages, we designed it with operability and monitoring in mind, so I believe the maintenance-related advantages will be significant in the future.”

### delivering on business targets with a resilient infrastructure

Another advantage of the ProLiant platform is that the staff can expand the number of servers, services and users without interrupting operations. According to DKIS, HP continues to use its advantage as an international corporation fully, and supports DKIS with solutions that use the company’s superior global experience and

proven results. That is why the company looks forward to the continuous support from HP and additional IDC-related equipment to provide better services, create new business models and develop applications.

For example, DKIS is promoting the production of Jet-Press, a database-linking, mail-distribution system featuring a unique engine. In cooperation with HP and JBS, DKIS is also planning to promote the production of components for shared parts that support business-marketing models. At the same time, the company endeavors to provide services demonstrating the greatest advantages in costs, deadlines and performance, while satisfying the corporate client’s needs.

“We would like to provide a mechanism to create new value from information, while utilizing database mechanisms based on the redundancy configuration that we’ve built,” says Adachi. “We have already received several business inquiries, and we are going to positively expand sales.”

Toda concludes: “Running on HP ProLiant servers with SteelEye LifeKeeper, our ASP system has achieved superior redundancy and reliability while minimizing our investment. It will enable us to create new services and realize superior proposals.”

