

CASE STUDY

Karaoke Solution Provider XING Consolidates Storage with InfiniBox® to Lower Costs and Improve Performance and Management

XING INC. is one of the largest companies in the commercial karaoke industry in Japan and the first in the industry to commercialize online karaoke. Established in 1992 by BROTHER INDUSTRIES, LTD., INTEC Inc., and BROTHER SALES, LTD., the company now offers a wide range of music-based services. Their offerings include commercial karaoke with a lineup of more than 300,000 songs; services for individuals via smartphone applications; “Miruhaco” that offers live and on-demand distribution of concerts and sporting events; and “kenkou-oukoku,” (healthcare) music therapy content for senior citizens’ facilities. The company is headquartered in Nagoya and Tokyo, with seven offices throughout Japan.

The IT System Department of XING consists of four groups – Development Promotion, Infrastructure Strategy, IT Control, and ICT Management – with a total of about 30 members, managing and operating the company’s and subsidiaries’ internal systems and service systems, including the JOYSOUND brand of karaoke. The Infrastructure Strategy Group provides support for the infrastructure that forms the foundation of XING’s IT systems, including the data center, servers, storage solutions and networks that form the foundation of the delivery system.

“Compared to the previous storage system, IOPS has been improved by a factor of 5X, and the efficiency of the system has increased significantly”



Mr. Akihiro Sakai
Chief Conductor of the
Infrastructure Strategy
Group at XING.ices



THE CHALLENGE: DATA GROWING AT AN ACCELERATED RATE AS END-USERS’ QUALITY REQUIREMENTS INCREASED

While karaoke systems do not delete historic song data, the number of songs is increasing by tens of thousands of songs every year. Compounding the challenge, end-users’ needs are moving towards higher sound and image quality. Sound data is changing from Musical Instrument Digital Interface (MIDI) to live sound. Video quality is changing from SD to HD, and the data volume per song is expanding. As a result, the amount of data that XING has to manage continues to grow at an exponential rate. XING was experimenting with different options for higher capacity and easier-to-use enterprise storage, as well as reacting to system failures and other issues over time. As a result, the enterprise significantly increased its complexity by building up the storage infrastructure with 27 storage systems from four different suppliers. The maintenance of such complexity was also extremely cumbersome, making the standardization of reliable, high-capacity storage an urgent necessity.

Solution Advantages for XING



Storage consolidation amounted to annual cost savings of 80%



“Set it and forget it” approach resulted in “no more storage-intensive work”



IOPS has been improved by a factor of 5

THE SOLUTION: RELIABLE STORAGE PLATFORM WITH HASSLE-FREE SETUP

After learning about Infinidat’s innovations in enterprise storage technology at an exhibition in Japan in 2018, XING immediately began comparing Infinidat with other companies’ storage products. “The main reason we decided to select Infinidat was that it is extremely reliable. We know we can trust Infinidat to deliver high performance at scale and prevent any technological issues. Storage consolidation was one of the best things we could have ever done for our data infrastructure,” said Mr. Akihiro Sakai, Chief Conductor of the Infrastructure Strategy Group at XING. Mr. Sakai was in charge of adopting Infinidat’s high-capacity storage.

XING’s first purchase was 250 TB of InfiniBox. Consolidation of storage into this single unit reduced the number of racks from four to one, which, in turn, significantly reduced the equipment and maintenance costs associated with the previous storage devices. “Annual cost savings amounted to 80%,” said Sakai.

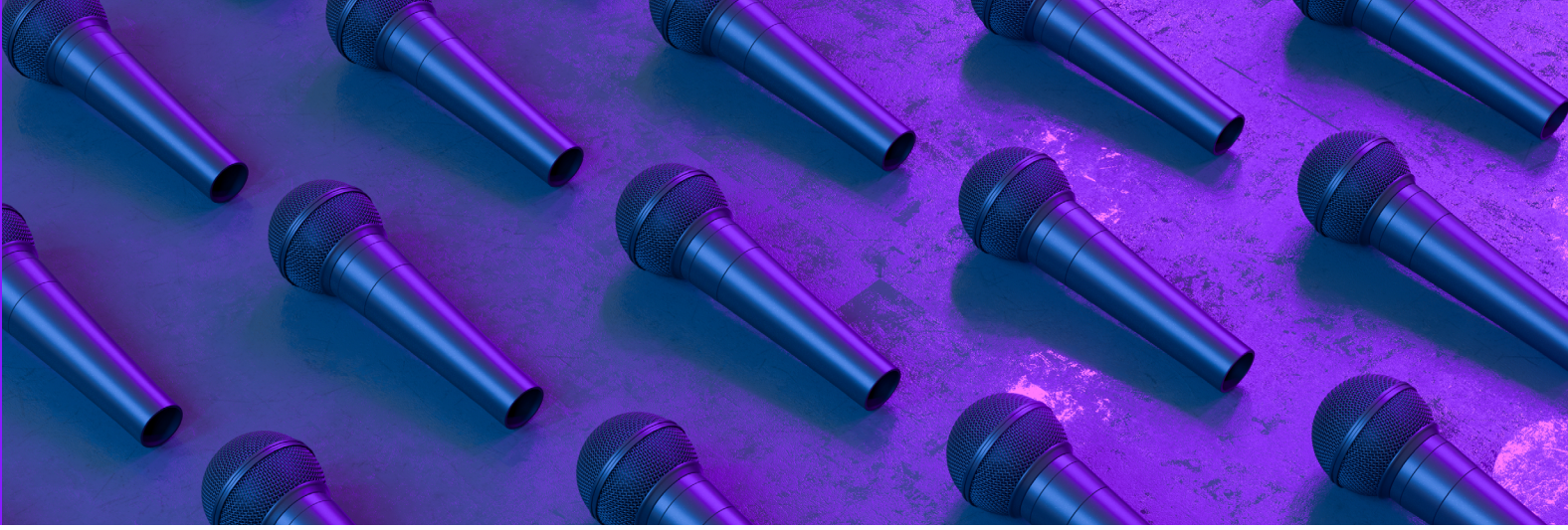
In the five years that XING has been using Infinidat solutions, there has been no downtime – an accomplishment that differentiates Infinidat’s storage solution for its constant, reliable uptime. Yet, as the volume of data increased dramatically with the shift to HD karaoke videos, XING sought to expand its capacity. The contracted capacity of the new InfiniBox was set at 2 PB, a large capacity that would not need to be expanded for the next several years – amounting to 2 InfiniBoxes in total. Preparations for the migration began in October 2022. A VMware virtual machine was set up in December, while operation of a server for internal systems began in January 2023. In parallel with this, data migration work was conducted, and in April, the migration of karaoke master data was completed. Operation of the new storage then began.

“With InfiniRAID™ available for RAID, we can view file systems and protocols such as iSCSI and NFS on a single management console, which made the design process very easy,” said Mr. Yoshihide Imamura, who led the Group’s storage implementation about the process. “We were able to complete the design in about a week, whereas it would have taken about a month with other companies’ products.”

In addition, Infinidat offers a highly flexible consumption model. The Capacity-on-Demand model used by XING is characterized by flexible capacity options. XING has deployed 1.5 PB of basic capacity and reserves 0.5 PB as excess capacity (2 PB in total). This means that, if the company wishes to expand capacity in the future, it can utilize a simple process, without adding more nodes or disks.

THE RESULT: SIGNIFICANT COST BENEFITS, SUPERIOR PERFORMANCE, AND REDUCED STAFF RESOURCES REQUIREMENTS

With the InfiniBox platform, XING simplified its infrastructure, improved performance, saved space, and achieved an annual cost savings of 80% by substantially reducing the equipment and maintenance costs associated with the previous storage devices.



While providing cost advantages, such as superiority in unit price per capacity and reduction of equipment and maintenance costs, the introduction of the system has resulted in significant benefits in terms of performance. Mr. Sakai commented, “Compared to the previous storage system, IOPS has been improved by a factor of 5X, and the efficiency of the system has increased significantly.”

There is also an advantage with the highly efficient and comprehensive ‘white-glove’ maintenance service provided: “Infinidat’s global support team remotely monitors the system 24/7, so any problems can be detected and addressed as soon as possible. In addition, because of InfiniBox’s triple-redundant cluster configuration, even if one disk fails, the impact on the system is extremely small, and there is no need to shut down operations. The need to always respond immediately when a failure occurs, regardless of the time of day, has been eliminated, and staff workloads have been reduced. Infinidat’s ‘set it and forget it’ approach has been put into practice, resulting in no more storage-intensive work,” added Sakai.

THE FUTURE: SUPPORT FOR MORE ROBUST DISASTER RECOVERY SYSTEMS AND CLOUD DEPLOYMENT

XING intends to utilize the cloud integration functions that Infinidat now provides across the boundaries between on-premises and cloud. In addition, by using the first InfiniBox as a high-performance secondary storage solution, the company plans to use it as a robust foundation for disaster recovery and business continuity.

To learn more about how Infinidat can help your organization scale to win, visit [Infinidat.com](https://www.infinidat.com).