Moving to a future-ready HCI platform to help global businesses boost workplace safety.

How **RIKEN KEIKI** moved mission-critical business systems to a Lenovo ThinkAgile HX Series hyperconverged infrastructure platform, powered by high-performance 2nd Gen Intel[®] Xeon[®] Scalable processors, to bring its gas inspection and detection solutions to more industrial customers around the world.

Lenovo Infrastructure Solutions for The Data-Centered



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1 Background

Founded in 1939 in Tokyo, Japan, RIKEN KEIKI has grown to become one of the country's largest providers of industrial gas inspection solutions and services. The company designs and manufactures specialist instruments to allow industrial customers to respond quickly to potential hazards and help maintain high levels of occupational health and safety. RIKEN KEIKI serves around 70% of its domestic industrial gas detection and alarm market, and continues to expand its operations to reach international customers.

2 Challenge

RIKEN KEIKI relies on its business systems to support its operations in Japan, including key process areas such as financial accounting, human resources, and more. In the past, the company relied on a traditional three-tier architecture to host its business applications, based on a virtualized server, storage, and networking environment.

Digital systems are becoming increasingly important for RIKEN KEIKI, as the company harnesses its data to promote innovation and accelerate business growth—both in Japan and internationally. Over the course of five years, the company's data volumes have grown 2.5 times, increasing the demands on its IT infrastructure.

Mr. Kimitoshi Kimura, Information Systems Section Chief – Management Headquarters, RIKEN KEIKI, explains: "In the past, we managed each component of our infrastructure separately, which made it complex and time-consuming to perform essential maintenance such as firmware and software updates. And because our servers and storage devices were supplied by different vendors, it was also difficult to track down the source of issues and get technical support to help remediate issues."

"Our previous IT platform was difficult to scale, but our data volumes will only continue to grow. We therefore looked for a way to expand our compute and storage capacity in a more flexible way."

Mr. Kimitoshi Kimura Information Systems Section Chief – Management Headquarters, RIKEN KEIKI

Why Lenovo? Simple scalability, high performance.

After reviewing proposals from multiple infrastructure vendors, RIKEN KEIKI decided to move from a traditional three-tier architecture to a cutting-edge hyperconverged infrastructure (HCI). The company determined that a Lenovo ThinkAgile HX3320 appliance, powered by high-performance 2nd Gen Intel[®] Xeon[®] Scalable processors and Nutanix AHV virtualization software, was the optimal choice to support its growing business in the long term.

By combining compute, storage, and networking into a single, centrally managed pool of resources, the Lenovo ThinkAgile HX Series solution offers RIKEN KEIKI high levels of performance, straightforward scalability, and low-touch maintenance.

"We felt that combining the three tiers of our infrastructure into a single layer would make it much simpler to manage," comments Mr. Kimitoshi Kimura. "We also get the peace of mind of a single point of contact for IT support. And when we are ready to scale out the solution, all we need to do is plug in an additional node, and the extra compute and storage resources will be available almost immediately." "Without a doubt, the Lenovo ThinkAgile HX3320 appliance with 2nd Gen Intel[®] Xeon[®] Scalable processors is the optimal HCI solution for RIKEN KEIKI. One of the deciding factors was the high level of performance within such a dense footprint, which helps us minimize the number of nodes in our environment and keep costs lean."

Mr. Kimitoshi Kimura Information Systems Section Chief – Management Headquarters, RIKEN KEIKI

Deploying smoothly despite pandemic pressures.

During the deployment phase of the project, the COVID-19 pandemic struck. In response, RIKEN KEIKI and its implementation partner Tokyo Nissan Computer System quickly pivoted to remote working, enabling the work to proceed smoothly.

Mr. Kimitoshi Kimura comments: "Prior to our go-live, we were nervous that we'd experience performance issues after moving our business applications from our previous virtualization platform to the Nutanix environment. In fact, we made the transition seamlessly, and all our core applications are now running perfectly on the Lenovo ThinkAgile HX Series platform."

Mr. Keisuke Yoshida, Information Systems Section – Management Headquarters, RIKEN KEIKI, adds: "After Lenovo delivered the Lenovo ThinkAgile HX3320 appliance to our data center, we switched over to remote working with Tokyo Nissan Computer System." "Although we encountered some challenges along the way, Tokyo Nissan Computer System gave us the support we needed to complete our transition to the new platform successfully."

Mr. Keisuke Yoshida

Information Systems Section – Management Headquarters, RIKEN KEIKI

Results

Today, the Lenovo and Nutanix HCI platform—powered by 2nd Gen Intel[®] Xeon[®] Scalable processors—supports all core business systems at RIKEN KEIKI, including financial accounting, human resources, and sales management.

Mr. Kimitoshi Kimura comments: "Although we were initially concerned that moving our application databases to a new platform might lead to reduction in performance, the opposite proved to be true. Thanks to enhanced data compression, we've measured a 30% boost in database performance."¹

By avoiding the need to manage multiple infrastructure components separately, RIKEN KEIKI is also saving significant time for its IT team.

Mr. Keisuke Yoshida adds: "In the past, tracking down the root cause of an issue often required us to look in many different places, including our server management console, our storage management system, and our virtualization management platform. Today, we can see the status of all our hardware and software at a glance in Nutanix Prism, which makes management far more efficient."

To help protect its mission-critical data and systems, RIKEN KEIKI has deployed an identically configured Lenovo ThinkAgile HX3320 appliance at a secondary site, with data replication from Nutanix to reduce the risk of data loss in the event of a recovery scenario. Looking to the future, the company plans to use the disaster recovery environment to enable the company to deploy upgrades to its production environment without the need to take business services offline—further enhancing the efficiency of its IT processes.



- Boosts database performance by 30%²
- Shrinks IT management workloads
- Enables fast, seamless scalability

"Since we moved to the new HCI platform, we've had almost no issues—the combination of Lenovo infrastructure, 2nd Gen Intel[®] Xeon[®] Scalable processors, and Nutanix software is serving RIKEN KEIKI very well."

Mr. Kimitoshi Kimura

Information Systems Section Chief – Management Headquarters, RIKEN KEIKI

What will you do with Lenovo software-defined infrastructure solutions?

The Data-Centered support global business growth with Lenovo smarter infrastructure solutions, powered by Intel[®] Xeon[®] Scalable processors.

Explore Lenovo Software-Defined Infrastructure Solutions



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