



Government

Cutting operating costs by moving to **HCI**

Yonezawa City Office

To ensure timely and cost-efficient citizen services, Yonezawa City Office consolidated siloed systems with a hyperconverged infrastructure (HCI) from Lenovo.

Lenovo

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Who is Yonezawa City Office?

Located at the southern tip of Yamagata Prefecture, Japan, Yonezawa City is the fourth largest municipality in the region. The city is well-known for local delicacies like Yonezawa beef and Tateyama apples. Home to the historic castle town of the Uesugi samurai clan, tourists from around the world also flock to Yonezawa City to visit cultural and historical landmarks. Yonezawa City Office provides municipal services for over 78,000 people spread across 548.51 square kilometers.

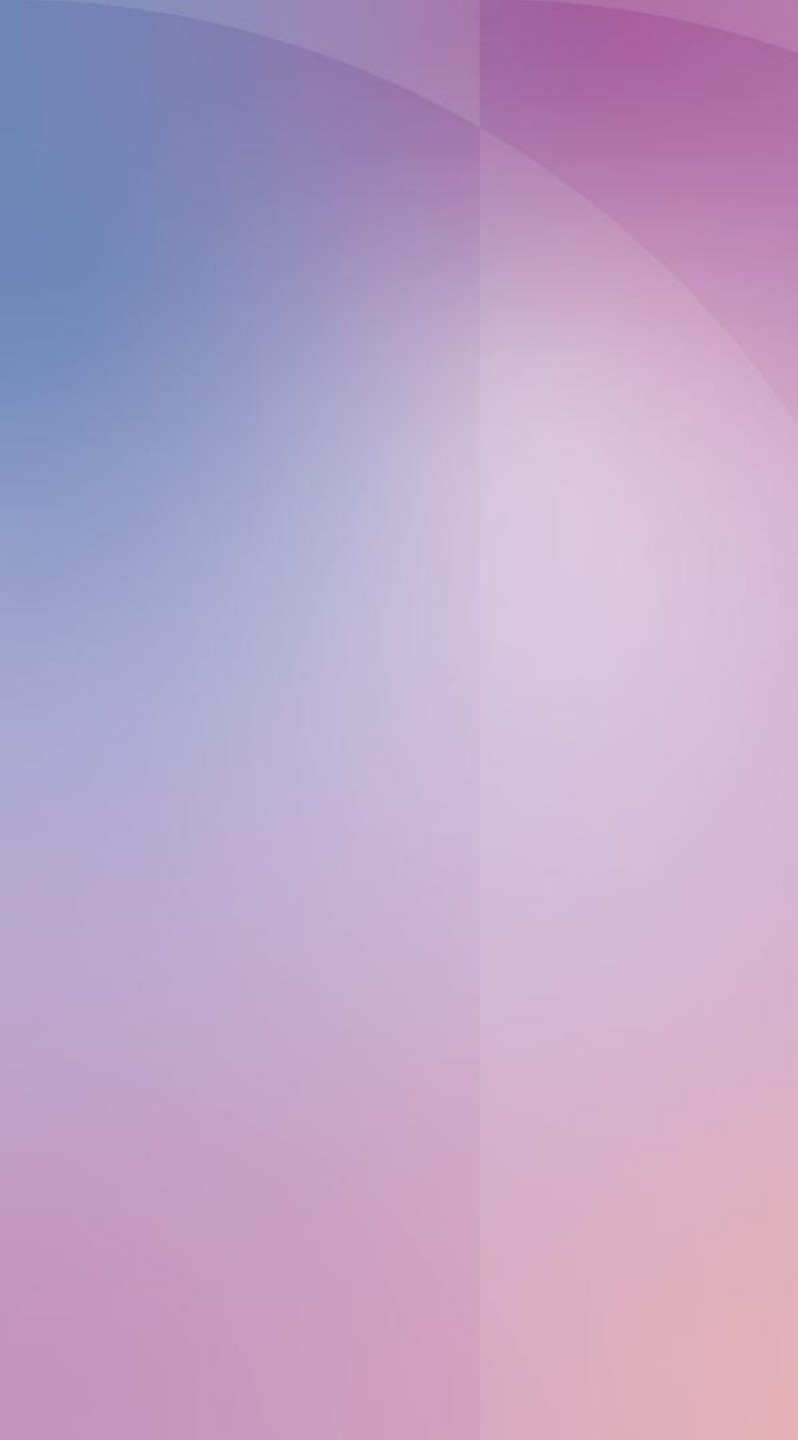


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The Challenge

To enhance citizen-facing services throughout Yonezawa City, the municipality built a brand-new City Office building. As well as meeting the highest standards of safety and sustainability, with earthquake resistance and energy efficiency baked into the design, the new building was created to serve as the central hub for all of Yonezawa City Office's operations—including its mission-critical IT systems.

In keeping with the modern design of the new building, the municipality saw the move to a new building as an opportunity to transform the IT infrastructure supporting its services by adopting the latest cutting-edge technologies. Specifically, the municipality set out to establish a software-defined infrastructure—a move that would help Yonezawa to enhance the flexibility and scalability of the IT solutions powering its citizens services.



Historically, Yonezawa City Office took an appliance-based approach to expanding and operating its IT infrastructure, with numerous individual servers, typically from different vendors, dedicated to each of the municipality's core systems and services. Building and operating its IT infrastructure in this way created significant management complexity, increased operational and maintenance workloads, and led to high IT infrastructure costs. In an effort to reduce costs, Yonezawa tried to predict its future IT capacity needs, but struggled to do this accurately—leading to either under- or overprovisioning.

Due in part to the complexity of its IT infrastructure, the municipality also struggled to ensure that its backup and disaster recovery (DR) operations could keep pace with growing data volumes. As a result, the municipality was concerned that it might not be able to ensure business continuity in the unlikely event of a natural disaster or cyberattack.



Mr. Naoyuki Takahashi

Assistant Manager and Information
System Chief, Policy Planning
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Department, Yonezawa City Office



“As we enter a phase of population decline, it is inevitable that we will see a reduction in the number of people that we can hire, so more efficient administrative maintenance will be required. We are actively exploring how new technologies can help us to tackle this challenge.”

Harnessing the power of **virtualization**

To reduce costs and enhance operational efficiency, Yonezawa consolidated its independent systems on a single software-defined hyperconverged infrastructure (HCI) based on Lenovo ThinkAgile HX650 V3 servers.

Providing a shared pool of compute, storage, network, and management resources, the Lenovo solution can be easily scaled to meet growing data volumes and support the demands of a wide range of municipal administration systems.

Hardware

Lenovo ThinkAgile HX650 V3

Software

Nutanix AHV

Partnering for **success**

To ensure best practice, Yonezawa City Office partnered with trusted business partner NEC PC to design and install the new Lenovo ThinkAgile HX servers, and to migrate its core systems and applications to the new hyperconverged environment. The choice was supported by the fact that NEC PC was a partner who had deployed a software-defined network (SDN) for Yonezawa.

With support from NEC PC and Lenovo, Yonezawa City Office was able to achieve a smooth implementation. Mr. Naoyuki Takahashi, Assistant Manager and Information System Chief, Policy Planning Division, Planning and Coordination Department, Yonezawa City Office, reflects: “This was my first experience of implementing a hyperconverged infrastructure, so there were some concepts that were unfamiliar to me. Whenever I asked the Lenovo team about technical terminology, they were always happy to explain. During the implementation, our dedicated Lenovo project manager led meetings with our IT team and explained key configuration information in a detailed and clear manner, which was very reassuring and helpful.”



Mr. Naoyuki Takahashi

Assistant Manager and Information
System Chief, Policy Planning
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Department, Yonezawa City Office



“One of the key benefits of HCI is that it enables you to start small and then expand as needed. Because of this, it was clear to us that a software-defined environment would help us to run lean and efficient IT operations. Many other municipalities in Japan have already taken a similar approach, so we were confident that we could realize the full benefits of the technology.”

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Results

Since deploying Lenovo HCI solution, Yonezawa City Office has not experienced any trouble but observed highly stable and reliable performance of the municipal systems.

If the organization were to experience system disruption, the new DR environment architected by NEC PC would help to ensure excellent business continuity. Mr. Naoyuki Takahashi reflects: “Our DR protocols kick in automatically without drawing special attention of service-users, which gives us great confidence in terms of business continuity planning [BCP].”

- ✓ Delivers highly available and stable system performance
- ✓ Reduces IT infrastructure costs
- ✓ Simplifies system operations and management

Increasing **convenience** for school administrators

The new approach has helped Yonezawa City Office to reduce IT infrastructure costs considerably, while also offering a simple, inexpensive way for it to expand in the future. As well as internal government systems, the new IT environment now hosts cloud security systems for Yamagata Prefecture, as well as the education and administration systems used by public elementary and junior high schools in the city.

“Many schools have benefited in a variety of ways from the new IT infrastructure that we have built,” comments Mr. Yuichi Shimanuki, Assistant Director and Health Supervisor at the Yonezawa City Board of Education. “For instance, we previously had some issues with support for operating systems ending at various times for each independent system, and struggled to get effectively instant support in identifying the distinct causes of a problem by working with multiple vendors and service providers. However, by migrating to the Lenovo ThinkAgile HX solution, we now have a platform that is much easier to manage and get immediate support from a single vendor, which makes resolving any issues much simpler.”



Mr. Yuichi Shimanuki

Assistant Director and Health
Supervisor at the Yonezawa City
Board of Education



“After implementing a new virtualized infrastructure based on Lenovo ThinkAgile HX servers, we have greatly improved the stability of our systems. Many teachers have commented that they encounter fewer issues and find that the applications we serve them are much more responsive and reliable.”

Why **Lenovo**?

Yonezawa City Office considered a wide range of hardware but ultimately selected Lenovo ThinkAgile HX servers, as the solution came highly recommended by its trusted business partner NEC PC. Lenovo's extensive track record of helping small-sized government organizations around the world enhance their IT operations was also a huge plus for the municipality. Furthermore, Yonezawa attached great importance to the logistics that pre-deployment work was performed locally at the NEC PC Yonezawa facility.

Mr. Naoyuki Takahashi says: "We are thinking of migrating existing systems running on physical servers onto the ThinkAgile HX HCI environment in the next round of system upgrades. We really look forward to proposals from Lenovo to support the plans overseeing the future of information systems in this city."



How can local governments deliver efficient services?

With Lenovo, Yonezawa City Office established a reliable software-defined IT environment that supports always-on citizen services.

[Explore Lenovo ThinkAgile HX Series](#)