

# Delivering personalized diagnostic testing and medical treatment.

How **Shanghai Pudong New Area Gongli Hospital** uses Lenovo ThinkAgile HX appliances, powered by 2nd Gen Intel® Xeon® Scalable processors, to keep its mission-critical medical information systems running reliably 24/7, 365 days a year.

Lenovo Infrastructure Solutions  
for The Data-Centered



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## Background

Shanghai Pudong New Area Gongli Hospital is a leading tertiary-level hospital in China. With 1,486 employees, including 540 clinicians and 600 nursing staff, the hospital treats more than 2 million patients each year.

In 2018, China's National Health Statistics Information Center and the Institute of Hospital Management of the National Health and Family Planning Commission launched two evaluation systems, requiring that tertiary-level hospitals must manage all medical and clinical records electronically by 2020. Tertiary-level hospitals must also achieve at least Level 4 maturity in data interconnection and standardization for all medical and health information. This ensures data is managed efficiently and securely, promotes the development of smart hospitals, and improves healthcare services for citizens.

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## Challenge

Shanghai Pudong New Area Gongli Hospital was promoted to a tertiary hospital in the last Five-Year Plan. Now, it must meet new national guidelines on clinical diagnosis and treatment. Over the next five years, the hospital must achieve Level 4 in data interconnection and standardization. It also aims to achieve the highest level of maturity for electronic medical records (Level 6).

The hospital's existing server and storage infrastructure had been in production for more than eight years, and could no longer meet its needs in terms of flexibility, efficiency, stability, availability, and simplicity. To meet the new national guidelines, Shanghai Pudong New Area Gongli Hospital needed upgrade the IT infrastructure underpinning its core picture archiving and communications system (PACS).



## Why Lenovo? Future-ready solutions.

Shanghai Pudong New Area Gongli Hospital replaced the existing three-tier architecture underpinning the HIS with a new, state-of-the-art hyperconverged infrastructure (HCI) based on Lenovo ThinkAgile HX5520 appliances, powered by 2nd Gen Intel® Xeon® Scalable processors.

Cao Luhua, Head of Network Hardware at Shanghai Pudong New Area Gongli Hospital, notes: “The combination of industry-leading Nutanix software, robust Lenovo hardware, and powerful 2nd Gen Intel® Xeon® Scalable processors made the Lenovo ThinkAgile HX Series the ideal platform for our HIS. It’s scalable, reliable, and easy to manage.”

Working with Lenovo, the hospital implemented one three-node cluster at its primary data center and a second three-node cluster at its secondary data center. With the Nutanix Acropolis Advanced Replication License, Shanghai Pudong New Area Gongli Hospital benefits from synchronous data replication between the two data centers. This enables the hospital to fail over almost instantly in the event of unplanned downtime at one site. To ensure sensitive data is always protected, regular backups are stored on the Lenovo ThinkSystem DX1100U storage array.

## Strategic partnership.

Throughout the implementation, Lenovo worked around the clock to help Shanghai Pudong New Area Gongli Hospital get everything up and running with minimal business disruption. This enabled the hospital to ensure consistently excellent levels of care during the transition to HCI.

The team created dedicated environments for its core PACS application and consolidated all patient data into a centralized database—all now running on the Lenovo ThinkAgile HX platform.

Shanghai Pudong New Area Gongli Hospital also enlisted Lenovo Services to provide ongoing hardware support for six years and software support for three years.



“Knowing that Lenovo can mobilize local support is a big advantage for us. If we ever encounter any issues, Lenovo experts work with us on-site to resolve them quickly and effectively.”

### **Cao Luhua**

Head of Network Hardware, Shanghai Pudong New Area Gongli Hospital

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## Results

With the PACS application now running on the Lenovo ThinkAgile HX platform, Shanghai Pudong New Area Gongli Hospital has improved picture archiving and communication across the organization—helping clinicians to provide patients with personalized diagnostics testing and medical treatment.

“Thanks to the ease of management and scalability of Lenovo solutions, we are much better placed to continue expanding our operations as data volumes grow,” comments Cao Luhua. “What’s more, with all our PACS data is available on a single platform that is accessible to staff and clinicians anytime, anywhere, we have opened up fresh opportunities for innovating in personalized diagnostics testing and medical treatment.”

Moving from a traditional three-tier architecture to the Lenovo ThinkAgile HX platform has also helped Shanghai Pudong New Area Gongli Hospital to reduce data center floorspace, cooling costs, and energy consumption.

“With the Lenovo ThinkAgile HX platform, we have also improved the environmental sustainability of our IT infrastructure and reduced our overall infrastructure costs,” says Cao Luhua. “As a result, we have released more resources to invest new medical information systems.”

✓ **Simplifies IT infrastructure management and strengthens collaboration**

✓ **Reduces data center floorspace, energy, and cooling costs**

✓ **Unlocks more resources to invest in new medical information systems**



“We look forward to strengthening our partnership with Lenovo as we continue to advance and expand our clinical operations. With cutting-edge technologies underpinning our core systems, and expert hardware and software support from Lenovo, we can provide personalized diagnostics testing and medical treatment to more patients.”

**Cao Luhua**

Head of Network Hardware, Shanghai Pudong New Area Gongli Hospital

## What will you do with Lenovo ThinkAgile HX solutions?

The Data-Centered deliver excellent patient care with  
Lenovo smarter infrastructure solutions, powered by Intel®.

[Explore Lenovo ThinkAgile HX Solutions](#)



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