Lifting public services to new heights.

How **Linyi City Government** used a hyperconverged infrastructure platform from Lenovo and Nutanix to modernize and improve its e-government cloud environment.

Lenovo Infrastructure Solutions for The Data-Centered

NUTANIX

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(1) Background

Linyi is a prefecture-level city located in the southeastern region of Shandong Province, China. Established more than 3,000 years ago, it is now the province's largest and most populous city, home to over 11 million people.

Linyi City Government directs and manages economic, cultural, and administrative programs at both the municipal and county level. It is responsible for delivering vital services to citizens and businesses, including education, healthcare, infrastructure, and urban planning.

2 Challenge

Life in Linyi has become increasingly digital during the last decade, with Linyi City Government embracing e-government services to meet the ever-evolving needs of citizens and realize more efficient operations behind the scenes.

It was becoming increasingly difficult for Linyi City Government to meet the skyrocketing demand for its services. The organization had established a private cloud platform—the first of its kind in Shandong Province—to support e-government services. However, years of growth had pushed the environment to its limit. Having deployed more than 1,000 virtual machines to support core business systems across hundreds of departments, the IT team faced growing bottlenecks that adversely impacted performance.

A cloud technology decision-maker at Linyi City Government, explains: "With our current environment, we were struggling to meet the needs of the different business departments. Almost all of our energy was taken up by administration and maintenance, leaving little to focus on our strategic priorities and government innovation. We urgently needed to find a new approach in order to make our cloud platform more scalable, reduce pressure on the IT team, drive down our costs, and react with greater speed and agility to future needs."

"We needed an IT architecture that enabled high performance, scalability, and reliability for our e-government cloud platform, while reducing costs and management effort. We determined that a hyperconverged infrastructure from Lenovo and Nutanix delivered best on these requirements."

Cloud Technology Decision-Maker Linyi City Government

Why Lenovo? Strong performance and solid support.

After evaluating multiple architectural configurations from different vendors, Linyi City Government decided that a hyperconverged infrastructure (HCI) from Lenovo on Nutanix offered the most effective fit for its needs. HCI is a modern, software-defined solution that natively integrates all IT resources to run any application and it delivers the scalability, performance, and operational efficiency that governments require today.

The organization put the Lenovo ThinkAgile HX Series solution through extensive proof-ofconcept tests to ensure it delivered high platform availability. Linyi City Government tested out the Nutanix Acropolis File Services, Nutanix Prism Central, and Nutanix Acropolis Block Services tools. Lenovo was closely involved right from these early stages. Linyi City Government took advantage of Lenovo Assessment Services, Lenovo Design Services, Lenovo Proof of Concept Lab, and Lenovo On-site Deployment Services to plan, design, validate, ultimately implement the new HCI platform.

"Lenovo's technical capabilities and localized partner services exceeded our expectations," says the cloud technology decision-maker. "The Lenovo team was quick to respond when we ran into issues and provided strong support during critical moments."

"Lenovo was able to demonstrate many successful deployments of its ThinkAgile HX platform in China, and we had a similarly positive experience during our own preliminary tests. This gave us confidence in the robustness of the hardware and in the capability of the Lenovo team to deliver a smooth implementation."

Cloud Technology Decision-Maker

Rising to the occasion.

Together with Lenovo, Linyi City Government took a phased approach to the implementation, migrating key workloads to the new HCI platform step by step. In phase one, the organization deployed an initial cluster of 16 Lenovo ThinkAgile HX5510 appliances with integrated Nutanix AHV virtualization software, supporting systems including its administrative service domain and internal communication applications.

Linyi City Government followed up with a second phase of expansion to support workloads ranging from public prosecution systems to public service portals and health insurance systems. Here, it deployed 42 Lenovo ThinkAgile HX5520 appliances. Key business databases run on Lenovo ThinkSystem SR650 and SR860 servers, which are connected to Lenovo ThinkSystem DE6000H storage arrays, with data replicated and backed up to a set of ThinkSystem DM3000H storage arrays.

Today, the organization operates five hyperconverged clusters in total, establishing a reliable HCI foundation to support its e-government cloud environment. With industry-leading Nutanix HCI software, Linyi City Government is bringing newfound efficiency, agility, and scalability to its private cloud platform. In addition, the organization makes use of Lenovo ThinkCloud Manager to provide a single point of control and operational services for managing this extensive environment.

"We are very satisfied with the overall performance and reliability of the Lenovo ThinkAgile HX platform."

Cloud Technology Decision-Maker Linyi City Government

3 Results

By embracing a HCI solution from Lenovo and Nutanix, Linyi City Government has simplified the management of its IT environment, reducing the administrative burden on its IT teams. With all capabilities natively built into the platform including intelligent data tiering and data locality to ensure predictable performance, the new IT environment can support any application and use case at scale, reducing cost, complexity, and deployment time. So, Linyi City Government can focus on innovation, and the applications and services that drive real value for their constituents.

"Lenovo and Nutanix solutions have delivered valuable savings around operating costs and resources," notes the cloud technology decision-maker. "Our IT team has been released from time-consuming operations and maintenance work; today, we rely on just two resources—provided by a local Lenovo partner—to manage our HCI platform."

With a resilient, efficient technology infrastructure that can scale rapidly, Linyi is enabling teams to work more effectively and shaping more agile services that respond better to citizen needs.

The cloud technology decision-maker concludes: "We have a strong architectural foundation to support the continued development of our e-government cloud. We look forward to taking the next steps on this journey with Lenovo, and delivering an even better experience for both internal teams and the citizens they serve."

- 2 full-time equivalent (FTEs) operate and maintain the entire HCI platform
- 20% lower costs while elevating scalability, availability, and reliability

Gained headroom to focus on driving service excellence and innovation

"Lenovo and Nutanix solutions offer a firm foundation for our e-government cloud. We have strengthened availability, efficiency, and resilience with an HCI platform that is ready to grow with us into the future."

Cloud Technology Decision-Maker

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

The Data-Centered meet increasing demand for services, while cutting costs and improving performance with Lenovo smarter infrastructure solutions, powered by Nutanix.

Explore Lenovo Software-Defined Infrastructure Solutions



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