

Increasing the prosperity of local businesses and citizens.

How **Bank of Chaoyang** uses Lenovo ThinkAgile VX solutions to support banking services that help to stimulate regional economic growth, increase financial inclusion, and alleviate poverty.

Lenovo Infrastructure Solutions
for The Data-Centered

Lenovo

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Background & Vision

Rapid growth has made Bank of Chaoyang one of the largest financial service providers in Liaoning Province, China. Headquartered in Chaoyang City, the bank provides savings, lending, credit cards, and insurance services to individuals, and small and micro businesses. Operating 72 branches with 1,700 employees, Bank of Chaoyang managed total assets equivalent to RMB 105.3 billion (US\$16.2 billion) as of 31 December 2020.

At one time, five out of 10 impoverished counties in Liaoning Province were in Chaoyang City. In response, Bank of Chaoyang and the local government have launched a joint poverty alleviation fund to encourage independent entrepreneurship and stimulate local economic development. In just five years, all five impoverished counties in Chaoyang City have made huge progress. In 2020, Chaoyang City made an official national-level industrial development zone, welcoming industry from Beijing, Tianjin, and Hebei in China, as well as firms from Japan and South Korea. More than 5,000 investment projects are planned for 2021, in areas such as equipment manufacturing, materials, and energy. 500 projects have invested a total of RMB 43.5 billion (US\$6.6 billion).


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Challenge

The establishment of an industrial development zone represented a historical opportunity for Chaoyang City. At the same time, it presented new challenge for Chaoyang Bank. To support industrial development projects, Chaoyang Bank must deliver more efficient and more innovative financial services. To this end, the bank established a treasury business to bring new services to market. These development processes and surging transaction volumes following the acquisitions were placing huge demands on the bank's IT infrastructure.

Previously, Bank of Chaoyang used a traditional IOE architecture comprising many separate server and storage units. Managing and scaling this sprawling environment proved time-consuming and difficult, while maintenance costs grew higher and higher. In total, the bank was using more than 100 different applications, but had only 30 employees to administer its multiple data centers.

To remedy these problems, Bank of Chaoyang launched a transformation program to streamline the infrastructure and create a software-defined data center. The bank wanted to build an agile environment that would enable rapid deployment of IT resources to support the expanding business, while reducing management workloads and operating costs.



Why Lenovo? Easy VMware integration and tested for the toughest workloads.

Initially, Bank of Chaoyang tried to use VMware solutions to simplify the infrastructure but found its older hardware was incompatible with VMware vSAN software, causing major performance issues. To solve these integration issues, Bank of Chaoyang decided to modernize the infrastructure with a hyperconverged platform from Lenovo. When assessing potential solutions, the bank recognized that Lenovo's VMware-certified ThinkAgile VX design would ensure compatibility with its existing VMware vSAN solutions and enable a fast, seamless deployment into its production environment.

Lenovo also configured the Intel Optane hard drives as the cache layer in the VMware vSAN architecture to provide high-speed, stable, low-latency processing performance.

Li Baosheng, General Manager of the Information Technology Department at Bank of Chaoyang, explains: "During tests, the Lenovo ThinkAgile VX platform reached an exceptional 1 million input/output operations per second [IOPS], making it ideal for supporting our most demanding applications."

The bank also struggled to implement an active-active disaster recovery plan, which was essential to meet the stringent requirements of the China Banking and Insurance Regulatory Commission (CBIRC). Li Baosheng says: "The new solution would support a two-site configuration, which would help us to optimize data availability."



Deploying an active-active architecture to safeguard business continuity.

After working with Lenovo to design the systems and run a proof of concept, Bank of Chaoyang implemented Lenovo ThinkAgile VX7520 solutions. The bank uses the integrated compute, storage, and virtualization resources to run a private cloud environment that supports its core applications.

Bank of Chaoyang worked with Lenovo on-site services teams to deploy the hyperconverged solutions at two data centers in an active-active configuration using VMware NSX software and VMware vSAN Stretched Clusters functionality. In the event of an incident at one location, the bank can instantly switch over to the second production site to keep operations running smoothly.

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Results

With the Lenovo platform, Bank of Chaoyang has moved closer to creating a fully modernized software-defined data center. The bank handles more than 500,000 transactions every day, and can easily scale compute or storage capacity as volumes increase. The active-active architecture protects business continuity and improves quality of service, and ensures Bank of Chaoyang meets CRIRC regulations.

The integrated hyperconverged infrastructure also reduces data center complexity and curbs the bank's reliance on a mass of separate hardware resources from various manufacturers, cutting licensing and maintenance costs. Furthermore, IT administrators now spend less time managing servers and storage and can prioritize strategic tasks, such as supporting the bank's product teams.

- ✓ Enables the bank to manage rising transaction volumes with a robust, scalable platform
- ✓ Simplifies infrastructure management and allows administrators to prioritize strategic work
- ✓ Ensures the bank meets stringent regulatory requirements by optimizing data availability



“The Lenovo ThinkAgile VX solution provides a robust foundation for our ongoing expansion. The agile hyperconverged platform enables us to accelerate the deployment of the resources that we need to launch new customer-centric services. Working with Lenovo, we can take advantage of the new opportunities presented by the Chaoyang City industrial development zone and contribute to local economic growth.”

Li Baosheng,

General Manager of Information Technology Department,
Bank of Chaoyang

What will you do with Lenovo ThinkAgile VX solutions?

Learn about how your business can simplify IT and accelerate time-to-value with hyperconverged solutions.

[Explore Lenovo ThinkAgile VX Solutions](#)

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