Transforming software development efficiency to drive company growth.

How **Nanjing Tianfu Software Co., Ltd.** used Lenovo ThinkSystem SR650 servers, powered by 2nd Gen Intel® Xeon® Scalable processors, to build a high-performance computing environment for software innovation.

Lenovo Infrastructure Solutions for The Data-Centered

Lenovo

1

Background

Nanjing Tianfu Software Co., Ltd. (Tianfu) is a high-tech enterprise focused on software research, development, and technical services. Established in 2011, the company is headquartered in Nanjing, China, and also has offices in Dalian, Ningbo, and other locations.

Tianfu has created software for thermal fluid simulation, data modeling, heat transfer topology, fan design, wind farm layout, and more. Employing more than 100 people, the company recently completed more than CNY 100 million (approximately USD 15.7 million) of round B financing and is on track to becoming a publicly listed organization.

2

Challenge

With approximately 80% of its workforce dedicated to research and design, Tianfu has found success in continual innovation. The company is growing fast, and has an initial public offering (IPO) in its sights.

To fulfill its expansion goals, Tianfu recognized that it needed to scale up its IT capabilities. Specifically, the company decided to build a new high-performance computing (HPC) environment to replace its existing workstation environment to support simulation modeling and software testing.

Tianfu was looking to run more projects in parallel and achieve faster results, which would empower its development teams to work more efficiently. As a result, the company could extend its growing competitive edge and seize more market share.

“We serve many different industries, including the power, aerospace, and engineering sectors with innovative software solutions. For the next stage in Tianfu's development, we needed more computing power.”

Zhang Jinfei
IT Manager, Nanjing Tianfu Software Co., Ltd.

Why Lenovo? Rapid ROI, high-density footprint.

The Tianfu IT team narrowed down its choices to Lenovo versus Dell technology, and built a business case for each option to enable an accurate comparison. Ultimately, the company chose the Lenovo offering due to the superior solution design and expected return on investment (ROI).

"The leader of our technical department judged that the specifications of the Lenovo solution—from number of cores to the amount of memory—was a better fit for our requirements and offered greater value for money," says Zhang Jinfei. "The IT team was very satisfied that the Lenovo offering would deliver what we were looking for."

Next, Tianfu engaged Lenovo Design Services to finetune the proposed solution design, ensuring that it met the company's exact requirements. During the design phase, Tianfu's IT team worked closely with Lenovo engineers to define and prioritize objectives for the new HPC environment.

Making an exciting move.

Tianfu took advantage of an office relocation to build its new HPC environment at the same time. Working with Lenovo HPC Deployment Services, the company installed an HPC cluster comprised of five Lenovo ThinkSystem SR650 servers featuring 2nd Gen Intel® Xeon® Scalable processors.

To ease the transition to the new infrastructure, Lenovo Services provided one-time on-site installation, cluster system acceptance, and system administrator training services. Lenovo Services also supported the Tianfu IT team in migrating workloads over to the new HPC cluster.

Today, Tianfu takes advantage of Lenovo Intelligent Computing Orchestration (LiCO) software to deploy, monitor, and manage its HPC resources.

The company also deployed six independent Lenovo ThinkSystem SR650 servers to support business operations including the single-item import of extranets, intranet file-sharing, and R&D code backup for different departments.

“Using our new HPC cluster based on Lenovo technology, Tianfu will be able to take on new, more advanced software development projects.”

Zhang Jinfei
IT Manager, Nanjing Tianfu Software Co., Ltd.

3

Results

With its own powerful HPC environment based on Lenovo technology, Tianfu has eliminated the cost and effort of procuring resources from third parties. The company's developers can access the capacity they need to kick off and scale up simulation testing with no delay, helping them work more efficiently. Tianfu can run more simulations in parallel than ever before and complete them sooner without prohibitive cost, allowing it to move fast on opportunities to advance innovation.

Equipped with its new HPC capabilities, Tianfu is ideally positioned to execute the next phase of its growth strategy. The company has taken another step forward towards its goal of going public, with the tools to extend its competitive edge.

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- **Eliminated costs and delays associated with renting HPC resources**
- **Sharpens Tianfu's competitive edge by accelerating innovation**
- **Boosts developer productivity by increasing parallelization and reducing cycle times**

“Lenovo technology now plays a crucial role in our software development processes, giving us the testing capacity to support our fast-growing company. The project with Lenovo went so well that we're already considering an extension to our Lenovo HPC platform.”

Zhang Jinfei
IT Manager, Nanjing Tianfu Software Co., Ltd.

What will you do with Lenovo HPC solutions?

The Data-Centered slash testing cycle times and boost developer productivity with Lenovo smarter infrastructure solutions, powered by Intel® Xeon® Scalable processors.

Explore Lenovo HPC Solutions