

Supporting trade and commerce within Southeast Asia and beyond.

How **Quanzhou Pacific Container Terminal Co. Ltd.** uses Lenovo ThinkSystem servers and all-flash storage arrays to keep its mission-critical systems available 24/7, and process huge volumes of customer shipments quickly and efficiently.

Lenovo Infrastructure Solutions
for The Data-Centered

Lenovo

1

Background

The Chinese port of Quanzhou plays a key role in domestic commerce and trading between local businesses and their partners across Southeast Asia and beyond. Since 2006, Quanzhou Pacific Container Terminal Co. Ltd. has operated the Shihu and Weitou Port Areas in the city, helping Chinese and international shipping companies to process, store, and dispatch bulk cargo and containers.

In total, Quanzhou Pacific Container Terminal's facilities cover 730,000 square meters, including extensive warehouse space, five shipping berths for vessels of up to 50,000 tons, and equipment for the loading and unloading of large-scale cargo. Every year, the Shihu Port Area alone processes container throughput exceeding three million twenty-foot equivalent units (TEUs).

Today, Quanzhou Pacific Container Terminal focuses on the goals of the government-sponsored "Maritime Silk Road" initiative, which looks to facilitate trading between China and the rest of the world. To support the scheme, the company aims to harness advanced business models and technologies that increase operational efficiency and ensure cargo moves through the port quickly and securely.

2

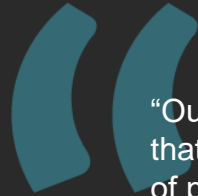
Challenge

In a major step toward building a modern, fully digitalized port facility, Quanzhou Pacific Container Terminal recently adopted the Navix platform, a cutting-edge business management and cargo dispatch system. Initially, the company looked to run the Navix solution on its existing mid-range server and storage infrastructure, but soon encountered significant challenges.

A spokesperson from Quanzhou Pacific Container Terminal Co. Ltd., explains: “Our new Navix system has exceptionally high performance requirements, which our aging infrastructure struggled to meet. Also, the hardware was increasingly difficult to manage, taking up more and more of our time and resources. Completing support tasks often meant procuring costly spares and having to contact vendors for specialist guidance, but they rarely offered a speedy response to our requests.”

With cargo processed 24/7 at the port, Quanzhou Pacific Container Terminal requires uninterrupted access to the core systems—but the existing infrastructure offered limited disaster recovery capabilities. “Our older setup increased the risk of downtime,” adds the spokesperson. “If we suffered an outage, our entire operation could grind to a halt, leading to huge costs and reputational damage.”

To remedy these issues, Quanzhou Pacific Container Terminal looked for a new infrastructure that would provide the performance and scalability to support the Navix platform for the next five to ten years. The company targeted a solution that would reduce the workload of its IT team, improve cost-efficiency, and ensure rapid recovery in the event of disaster.



“Our systems simply have to remain available at all times. We looked for a partner that could provide a multi-site disaster recovery strategy to ensure the highest levels of protection against downtime.”

Spokesperson

Quanzhou Pacific Container Terminal Co. Ltd.

Why Lenovo? Positive track record and cost-effective solutions.

After assessing solutions from more than five vendors, Quanzhou Pacific Container Terminal decided to deploy Lenovo ThinkSystem servers, storage, and network switches to support the Navix platform. The company worked with Lenovo Services to design and develop an active/active architecture with an additional remote disaster recovery site to optimize data availability.

The spokesperson explains the selection: “During the presales phase, we held a very positive consultation with Lenovo, which inspired confidence that they had the right expertise to support the project. Also, Lenovo offered a more cost-effective, integrated solution than any other vendor, and some members of our IT team had enjoyed a good experience working with Lenovo in the past.”





“Although we have very demanding business and technical requirements, Lenovo delivered a solution that meets our objectives in terms of performance, availability, and manageability.”

Spokesperson

Quanzhou Pacific Container Terminal Co. Ltd.

Implementing a dual-site integrated solution.

Assisted by the Lenovo Services team, Quanzhou Pacific Container Terminal deployed two Lenovo ThinkSystem SR950 servers to support the Oracle database underpinning the Navix platform. The company also uses four Lenovo ThinkSystem SR860 servers with VMware vSphere virtualization software at the Shihu Port Area data center, and three Lenovo ThinkSystem SR650 servers with VMware vSphere at the Weitou Port Area site to run the core system.

In addition, Quanzhou Pacific Container Terminal implemented two Lenovo ThinkSystem DE6000F all-flash storage arrays and Lenovo DX8200D storage gateways at Shihu in an active/active configuration, with one storage array and gateway at Weitou to serve as a remote recovery site. The company also added Lenovo switches, and uses Lenovo XClarity software to manage the infrastructure.

The spokesperson continues: “Lenovo delivered first-class assistance from start to finish, covering solution design and planning, the proof-of-concept phase, and then the implementation and configuration of the servers and storage across our various data centers. Moving forward, we will continue to work with the Lenovo team to keep our new infrastructure running in peak condition.”



“Throughout the engagement, Lenovo provided clear communications that helped to ensure the multi-site deployment process ran seamlessly.”

Spokesperson

Quanzhou Pacific Container Terminal Co. Ltd.

3

Results

With the Lenovo solution, Quanzhou Pacific Container Terminal has the reliable foundation needed to support the mission-critical Navix platform and process shipments quickly and efficiently. Using the Lenovo servers and all-flash storage, the company has increased infrastructure performance, with up to one million input/output operations per second (IOPS)—ensuring front-line business teams at Shihu and Weitou gain rapid access to key data on port activities and cargo movements.

The spokesperson adds: “Crucially, the active/active Lenovo architecture strengthens our disaster recovery strategy and enables us to recover almost instantly in the event of an incident at one data center. By switching to the Lenovo infrastructure, we have reduced the risk of costly downtime, ensuring our port operations run smoothly day and night for our customers.”

Furthermore, Quanzhou Pacific Container Terminal has achieved significant time savings with the Lenovo solution. Lenovo XClarity software enables the company to administer the entire infrastructure from a single console, simplifying management and maintenance tasks, and freeing the IT team to spend more hours working on value-add activities.



- ✓ **Boosts infrastructure performance, ensuring rapid access to mission-critical systems**
- ✓ **Supports 24/7 port operations, with near-instant recovery times in the event of an incident**
- ✓ **Simplifies infrastructure management, freeing IT team to work on value-add tasks**
- ✓ **Delivers scalability and openness to underpin ongoing modernization initiatives**



Looking ahead.

In future, Quanzhou Pacific Container Terminal feels confident that the openness and scalability of the Lenovo solutions will help to support the ongoing modernization and expansion of the port facilities.

The spokesperson concludes: “As the Maritime Silk Road initiative gathers pace, we will handle growing volumes of cargo for our customers. Thanks to the flexible, robust, and agile Lenovo infrastructure, we are delivering a high-quality service to our local and international partners, ensuring their shipments move through the port of Quanzhou and onto their next destination without delay or hassle.”



“Virtualization technologies from Lenovo and VMware help to optimize server resource utilization and ensure that we operate as cost-efficiently as possible.”

Spokesperson

Quanzhou Pacific Container Terminal Co. Ltd.

What will you do with Lenovo ThinkSystem solutions?

The Data-Centered keep international shipments moving with Lenovo smarter infrastructure solutions.

[Explore Lenovo ThinkSystem Server Solutions](#)

Lenovo and the Lenovo logo are trademarks or registered trademarks of Lenovo.

Other company, product and service names may be trademarks or service marks of others.

© Lenovo 2021. All rights reserved.