



Connecting southern Peru with the rest of the world.

How **Terminal Internacional del Sur** uses Lenovo ThinkAgile VX hyperconverged solutions, powered by VMware vSAN® software, to support international trade and foster economic growth in Peru.

Lenovo Infrastructure Solutions
for The Data-Centered

Lenovo

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Background

Holding the concession to operate the port of Matarani since 1999, Terminal Internacional del Sur (TISUR) plays a pivotal role in the social and economic development of the southern region of Peru. Situated on the Pacific coast, Matarani is the country's second busiest port, and offers reliable transport links to the Peruvian interior, northern Bolivia, and southern Brazil via the Interoceanic Highway.

Part of the Romero Group, one of Peru's largest business consortiums, TISUR aims to deliver a consistently high-quality service to its clients in the shipping and logistics industries—ensuring cargo reaches its destination on time, every time and that Matarani strengthens its position as the port of choice for South American companies exchanging goods with the rest of the world.

Within the port, TISUR provides infrastructure for the reception, processing, and storage of shipping containers, mineral resources, bulk materials, and other large-scale and specialist loads. The port facilities include container storage space amounting to 300,000 TEUs (twenty-foot equivalent units) and equipment with the capacity to handle more than 6 million tons of mineral-based materials every year.

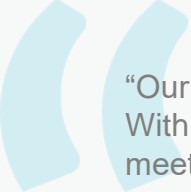
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Challenge

To move cargo through the port quickly and efficiently, TISUR relies on many digital processes that support operations including weighing goods, checking shipping manifests, and tracking items loaded onto waiting trucks and ships. However, the company recently began to encounter issues with the infrastructure underpinning these key applications.

TISUR relied on a legacy three-tier infrastructure consisting of separate server and storage solutions. As the business grew, this setup was difficult to scale without adding layers of complexity, while managing the individual components took many hours. The company also occasionally suffered downtime that increased the risk of shipping delays.

To solve these issues, TISUR aimed to complete a comprehensive refresh of the infrastructure environment. The company looked to deploy a modern, robust, and scalable platform that would improve performance and capacity available to its applications, reduce management complexity and costs, and help to support future digital transformation initiatives.



“Our clients in the shipping industry rely on us to process cargo without delay. With our infrastructure aging, we knew we needed to modernize our setup to meet our quality of service goals.”

Pedro Valencia

Information Technology Administrator, TISUR

Why Lenovo? Simplicity of deployment and tight VMware integration.

After evaluating solutions from three vendors, TISUR decided to deploy Lenovo ThinkAgile VX hyperconverged infrastructure (HCI), powered by VMware vSAN® and VMware vSphere® software, with Lenovo ThinkSystem NE1032T RackSwitch network hardware. The company uses the integrated server, storage, and virtualization resources to run more than 50 virtual servers that support its production and test environments.

Valencia explains the selection: “Our previous experience of Lenovo solutions and services had been very positive: we knew that they offered some of the most advanced and stable enterprise platforms on the market. Also, we recognized that the pre-configured HCI nodes would make it easy for us to scale the platform in line with our workloads.”

Even when one of the competing vendors aggressively dropped its price-point, TISUR was still convinced that Lenovo offered the best option. As it was moving from an older infrastructure that included some virtualization solutions, TISUR knew that the changeover process to the Lenovo and VMware platform would be relatively straightforward and risk-free.



Going live in just one week.

To implement the four Lenovo ThinkAgile VX 2U Certified Nodes and migrate applications from the old infrastructure to the new platform, TISUR worked with Lenovo partner TC Solutions—a trusted collaborator for ten years. The Lenovo platform now runs many systems crucial to the smooth running of the port, such as ticketing systems that enable logistics clients to collect cargo as quickly as possible.

Normally, when an enterprise tries to overhaul its core infrastructure, some negative impact on business continuity during the switchover is expected. Working with Lenovo and TC Solutions, TISUR experienced very little downtime during the process thanks to their excellent support. The entire deployment was completed within one week, which was an excellent result.

Building on this success, TISUR engaged Lenovo, VMware, and TC Solutions to provide after-sales support services, which led to several months of meetings to discuss solution optimization and how the company could make the most of the capabilities available.



“One of the greatest benefits of working with Lenovo and VMware is the ongoing support that we receive from real infrastructure experts.”

Pedro Valencia

Information Technology Administrator, TISUR

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Results

With the Lenovo ThinkAgile VX platform, TISUR is well-placed to ensure client shipments move through the port of Matarani as quickly as possible. By deploying the Lenovo and VMware vSAN HCI solution, the company has increased server performance by 300%, reducing application response times and helping to accelerate key operational tasks, such as generating reports and processing cargo.

The Lenovo platform gives TISUR the rock-solid foundation required to keep shipments moving through the port facilities. Previously, the complexity of its architecture caused frequent headaches, but now TISUR can easily scale the environment by adding extra nodes, and it knows that the Lenovo systems will remain available round-the-clock.

For example, TISUR's cargo weighing systems suffered 72 hours of downtime last year, causing major bottlenecks and slowing the processing of client shipments. Since the company implemented the Lenovo ThinkAgile VX platform, it has enjoyed non-stop operations, helping it to ensure that goods are loaded onto ships or trucks faster and reach their destination sooner, whether in South America or overseas.

TISUR has also achieved significant time savings by moving to the hyperconverged infrastructure from Lenovo and VMware. Rather than having to perform fixes, upgrades, and maintenance on the server, storage, and virtualization layers separately, the company manages the whole environment via the Lenovo XClarity and VMware vCenter® software portals—simplifying complex administration tasks and reducing operational costs.



- ✓ **300% performance increase helps to accelerate the processing of shipments**
- ✓ **Improves quality of client service as key applications are now available 24/7**
- ✓ **Unlocks valuable time savings as hyperconverged architecture simplifies management tasks**
- ✓ **Provides a flexible, scalable platform to achieve future digital transformation objectives**



“Looking ahead, the Lenovo and VMware technology provides the flexibility we need to launch other digital transformation projects and continue to modernize our infrastructure, like moving workloads to the cloud. We are confident that our work with Lenovo and VMware will help us to continue to contribute to the economic development of the region and to keep Matarani as the port of choice for Peruvian companies trading with the rest of the world.”

Pedro Valencia
Information Technology Administrator, TISUR

What will you do with Lenovo ThinkAgile VX solutions?

The Data-Centered ensure that cargo reaches its destination on time with Lenovo smarter infrastructure solutions, powered by VMware.

[Explore Lenovo ThinkAgile VX Solutions](#)

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