Logistics

Delivering 24/7 video surveillance

Port of Barranquilla

Using a Pivot3 HCI appliance—driven by Lenovo ThinkSystem SR655 servers powered by high-performance AMD EPYC™ processors—to deliver always-on availability for mission-critical security systems.

Powered by

AMD EPYC

Lenovo

redsis

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Who is
the Port of
Barranquilla?

With more than 85 years of experience, the Port of Barranquilla is the logistics platform that connects Colombia to the world.

This terminal mobilizes 62% of the cargo of Barranquilla's port zone, focused on containers, general cargo, bulk, coke, refrigerated, and frozen cargo.

Thanks to its human resources, infrastructure, security, and modern technology, the Port of Barranquilla is recognized for integrating solutions and delivering tailor-made logistics for its clients' logistics needs.

PUERTO DE
BARRANQUILLA
SOCIEDAD PORTUARIA

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The
Challenge

The Port of Barranquilla occupies a key role in the supply chain, and the organization is responsible for handling hazardous, high-value, and other types of sensitive cargo. To help ensure the security of logistics within its ports, terminals, and warehouses, the organization uses video cameras to track the movement of people and cargo.

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"Video surveillance is truly a mission-critical capability for our organization. If our cameras went offline unexpectedly, goods export operations would stop until we could restart them. That's because as well as helping us to detect and investigate illicit activity, surveillance video acts as an audit trail that shows that the Port of Barranquilla is operating according to industry best practices and government regulations."

Diego del Portillo
Coordinator – Technology Infrastructure, Port of Barranquilla

In the past, the Port of Barranquilla captured digital video from cameras to a central storage platform for analysis. With its existing IT environment approaching end of life, the organization decided to look for a new long-term solution.

"Many of our cameras record in high definition [HD] or 4K, which means they generate massive amounts of data," continues del Portillo. "As time went by, it was becoming more and more time-consuming to access our video recordings, which is crucial to support active investigations and audit activities. Exporting video data would sometimes take as long as two days, diverting our investigators from value-added work. We were keen to accelerate that process, and lay the foundation for innovative future use cases, such as video analytics."

"We set out two key goals for a new video surveillance infrastructure: capacity and service availability. We needed the ability to store hundreds of parallel HD and 4K video streams in real time, and access that data rapidly any time of the day or night."

Diego del Portillo
Coordinator – Technology Infrastructure, Port of Barranquilla

Why Lenovo?

After a formal evaluation process covering several leading IT vendors, the Port of Barranquilla selected a purpose-built hyperconverged solution for modern video surveillance from Pivot3, powered by Lenovo and AMD EPYC™ processors.

Lenovo worked in close collaboration with Redsis, a Lenovo Platinum Partner, on this opportunity, benefitting from the Redsis team's deep experience and knowledge of the Port of Barranquilla's needs.

"When we discussed the proposed solution with the manufacturers of our video surveillance equipment, they told us that the combination of Pivot3, Lenovo, and AMD processors was one of their approved platforms for mission-critical infrastructures," says del Portillo. "Another aspect of the solution that we appreciated is the ease of administration. With Lenovo XClarity Administrator, we can manage all compute, storage, and networking components from a single point of control with minimal manual effort."

Effective
collaboration

The new hyperconverged infrastructure (HCI) is built on a Pivot3 Acuity V5-2005 Surveillance HCI appliance, integrated with Lenovo ThinkSystem SR655 servers powered by high-performance 2nd Gen AMD EPYC™ 7302P processors. Virtualized with VMware vSphere and running the Pivot3 Acuity Surveillance Edition HCI software platform, the new solution is deployed in a three-node high-availability configuration—ensuring automatic failover in the event of a node failure.

Hardware
Lenovo ThinkSystem SR655 powered by 2nd Gen AMD EPYC™ 7302P processors
Pivot3 Acuity V5-2005 Surveillance HCI

Software
Lenovo XClarity Administrator
Pivot3 Acuity Surveillance Edition
VMware vSphere

Services
Lenovo Advanced Deployment Services
Lenovo Warranty Upgrade

Working together with teams from Lenovo and Pivot3, the Port of Barranquilla deployed the new environment into production. The HCI platform is provisioned with 400 TB of usable storage capacity, helping to provide the headroom for long-term data growth.

"At the beginning of the project, I assumed there might be some delays because we were working with multiple organizations, but the Lenovo and Pivot3 teams worked together seamlessly," recalls del Portillo. "Lenovo handled the implementation of the hardware and firmware, while Pivot3 configured the appliance remotely. The implementation was very straightforward—in fact, it was one of the fastest I've experienced in my entire career."

"**We already make extensive use of Lenovo solutions in other areas of our data center, and we've always found the technology to be robust, performant, and cost-efficient. The quality of Lenovo's support services also gives us great peace of mind—we know we can always get help if we need it.**"

Diego del Portillo
Coordinator – Technology Infrastructure, Port of Barranquilla

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"By deploying our video surveillance
platform on Lenovo ThinkSystem
SR655 servers powered by AMD
EPYC™ processors, we've boosted
our compute performance by a factor
of four—enabling us to support the
organization for years to come."

Diego del Portillo
Coordinator – Technology Infrastructure,
Port of Barranquilla

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Results

By deploying the new Pivot3 appliance—powered by Lenovo and AMD—the Port of Barranquilla has significantly enhanced its mission-critical surveillance capabilities.

"We've accelerated video export processes from up to two days to just four hours—91% faster," says del Portillo. "Thanks to our Lenovo, AMD, and Pivot3 solutions, we can deliver evidence to auditors and law enforcement faster than ever. As they have faster access, our investigation teams are now able to spend more time on other value-added duties, which helps us improve the overall security posture of the organization."

✓ 4x increase in compute performance

✓ 91% faster video exports

✓ 24/7 availability

With the new highly available HCI solution at the heart of its approach to video surveillance, the Port of Barranquilla can ensure 24/7 operations—reducing the need for costly shutdowns to its ports, terminals, and warehouses. Del Portillo confirms: "We have already tested the disaster recovery capabilities of the new solution—they work perfectly."

"	"Lenovo and AMD are brands backed by excellent technology, people, and services. I wouldn't hesitate to recommend the combination to other organizations looking for a new platform for mission-critical systems."

Diego del Portillo
Coordinator – Technology Infrastructure, Port of Barranquilla

How Do You Keep Cargo Moving Smoothly and Securely Through Ports?

Delivering always-on availability for its mission-critical security systems with Lenovo and AMD.

Explore Lenovo Security and Surveillance Solutions

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AMD
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