



## Background

Portimão is a port city located in the Algarve region of southern Portugal. Home to around 60,000 people, it is the second most populous city in the Algarve. Historically a fishing and shipbuilding center, Portimão has developed into a popular tourist destination in recent decades.

Município de Portimão is the city's municipal body. Its mission is to define and implement policies that support the interests and satisfy the needs of the local population. The municipality's work touches all aspects of city life, from health, education, and housing to transport and civil protection.



## Challenge

Over the years, Município de Portimão has built up an extensive IT infrastructure both to support back-office systems, such as email and enterprise resource planning (ERP) applications, and public-facing digital services, including e-government portals for managing urban development planning submissions and geo-mapping consultations.

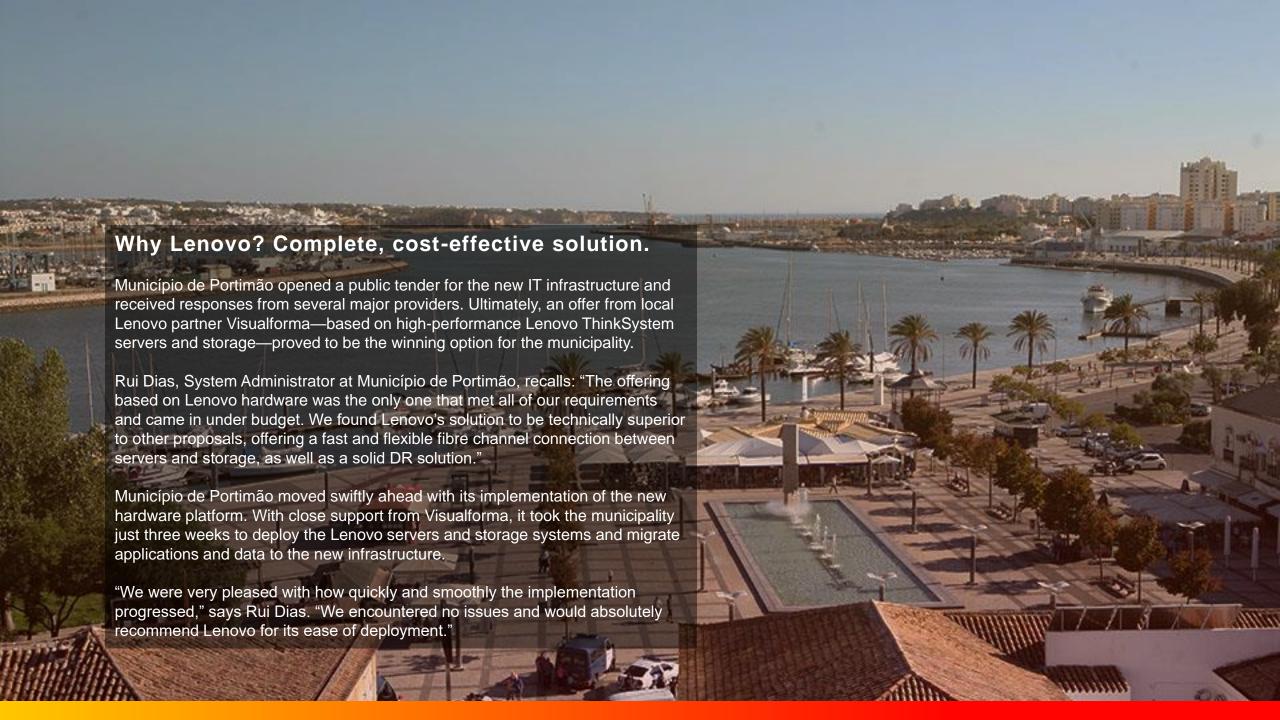
As more citizens and employees embrace digital services, demand for IT resources has only been growing. The municipality's existing IT infrastructure, which had not been refreshed since 2016, was showing increasing signs of strain—particularly when it came to keeping pace with rising data volumes.

Carlos Lourenço, IT Manager at Município de Portimão, explains: "We had essentially maxed out the 40 TB capacity of our existing storage platform and it couldn't be expanded further. We also had concerns around data availability and disaster recovery [DR]. While we performed regular backups, they were taking longer and longer to complete. We also did not have a separate DR platform in place, which meant that if operations were interrupted at our main data center, we couldn't keep working."

To address these issues, Município de Portimão looked for a new infrastructure that could deliver improved performance and scalability, as well as ensure that critical data and applications were readily available even in the event of a disaster.

"Our IT infrastructure had reached its limits in terms of performance and capacity. We urgently needed more on all fronts: higher storage capacity, faster storage and network speeds, increased RAM, and greater computing power."

Carlos Lourenço IT Manager, Município de Portimão



### Peak performance and better business continuity.

To reinvigorate its core production environment, Município de Portimão introduced three Lenovo ThinkSystem SR650 servers, powered by 2nd Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors. Located in a data center at the municipality's headquarters, the Lenovo platform comprises 120 processor cores and offers 1.5 TB of available RAM.

Município de Portimão also established a new DR environment at a separate location. Here, it has deployed three Lenovo ThinkSystem SR530 servers, each featuring two 2nd Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors and 512 GB of RAM.

To simplify and centralize management of the Lenovo servers, Município de Portimão makes use of Lenovo XClarity Controller Enterprise. This solution standardizes and automates routine system management tasks, such as software and firmware updates, saving the IT team valuable time and effort.

For storage, the municipality has installed one Lenovo ThinkSystem DE6000H hybrid storage array in its production environment. It can now draw on 100 TB of solid-state drive (SSD) storage capacity, with the ability to extend the system to up to 4.3 PB in total. Município de Portimão has also deployed two Lenovo ThinkSystem DE2000H storage arrays to support its DR environment.

In addition to the new Lenovo hardware, Município de Portimão maintains a separate 120 TB storage system for backups, as well as another 100 TB of backup storage in the public cloud. This is to ensure maximum data availability and business continuity, in the unlikely event that there is an issue impacting both production and DR sites.

Município de Portimão also takes advantage of Lenovo's YourDrive YourData service, which allows organizations to retain possession and dispose of failed drives, protect sensitive data, and maintain compliance with corporate retention and disposal policies to alleviate liability risks. Lenovo's YourDrive YourData retention service covers all system drives to help keep your data under your control, meet data privacy requirements, and dispose of the drive at your discretion.



"As we lacked a DR environment in the past, it meant that if there was a serious incident at our production data center, we would have needed to buy, configure, and deploy a new infrastructure from scratch. This process could have taken anywhere between one to three weeks. Now, with the new Lenovo DR platform, we can be back up and running in less than 24 hours."

#### **Rui Dias**

System Administrator, Município de Portimão



#### Results

With Lenovo technology, Município de Portimão has been able to meet increased IT demands with ease. Compared to the municipality's previous IT platform, Lenovo ThinkSystem servers offer three- times more processing power and five-times faster internal network speeds.

Additionally, Município de Portimão can draw on 60% more immediate storage capacity, plus higher storage speeds thanks to all-SSD Lenovo storage arrays.

"Not only has Lenovo ThinkSystem storage solved our immediate capacity issues, it has helped accelerate our daily backup cycle," confirms Carlos Lourenço. "Incremental backups that previously took eight hours now complete in just two hours, which is 75% faster than before."

The Lenovo hardware is also more environmentally friendly and cost-effective to operate, consuming around 20% less energy than the municipality's previous landscape.

Most importantly, Município de Portimão now has an IT infrastructure that's capable of growing with its ambitions. Not only has the municipality gained ample storage capacity, memory, and processing power to meet its foreseeable computing needs, Lenovo has brought newfound flexibility and scalability to the data center—allowing Município de Portimão to be ready for whatever the future might hold.



- 2.5x increase in storage capacity
- 75% faster backups

- 3x boost to computing power
- 20% lower energy consumption

"With Lenovo infrastructure, we can operate with greater speed, scale, and reliability than ever before. As a result, our teams can work with key applications and data more effectively and deliver a higher quality of service to the people of Portimão."

Carlos Lourenço IT Manager, Município de Portimão

# What will you do with Lenovo smarter infrastructure solutions?

The Data-Centered serve citizens and empower employees with Lenovo smarter infrastructure solutions, powered by Intel® Xeon® Scalable processors.

**Explore Lenovo Smarter Infrastructure Solutions** 



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

Intel, the Intel logo and Xeon are trademarks of Intel Corporation or its subsidiaries.

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

© Lenovo 2022. All rights reserved.