



Capgemini Collaborates with the Administration of the Port of Lisbon to Improve Data Center Performance

Deployment of a server virtualization platform guarantees cost reduction

The Situation

After renewing servers which were at the end of their life cycle, the Administration of the Port of Lisbon (Administração do Porto de Lisboa. APL) started the next phase of their project. The company began a data center assessment and then moved on to deploy a server virtualization platform. APL's management chose virtualization in order to rent infrastructure as a service, and increase flexibility and scalability of their IT assets. Physical servers generate a large volume of waste, especially with regards to processing capacity so virtualization was seen to be more costeffective. The concept was supported by a business case, where the potential gains obtained from this solution were measured against the alternative option to renew the system and migrate to new equipment.

The Solution

Capgemini implemented the recommended server virtualization platform, which consolidated a set of 31 servers into just three sets of high-performance equipment. Besides the large reduction in the amount of equipment and respective property costs, this also increased the efficiency and effectiveness of its computer systems, with availability levels very close to 100%.

The project involved three distinct phases:

 a detailed data center assessment of existing systems and the development of a business case for decision support

this project was due to three factors. Firstly, due to the project's meticulous preparation, since its initial assessment, having APL and Capgemini elements working together as a team. Secondly, because of the technical capability and experience of the Capgemini team which we realized, since the beginning, as being knowledgeable on the subject which was reflected in every detail. Lastly, on the maturity and robustness revealed by both the chosen hardware and software.

People matter, results count.



- implementation of the virtualization platform and integration with the existing infrastructure
- server migration to the new platform, without the need for specialized systems reinstallation services.

In order to achieve and ensure the seamless integration of the new platform with the existing infrastructure, Cappemini conducted comprehensive knowledge transfer sessions with API's technology team.

The Result

With implementation of the new infrastructure complete, Capgemini used the old redundant systems as back-up to minimize any risk of system failure.

The project reduced:

- the number of physical servers required by 90%
- installed capacity needed for the same performance level by 54%
- the amount of occupied space in the data center by 76%.

All of these actions represent a direct impact on the data center's energy consumption, increased levels of systems availability (almost 100%) and a reduction of service levels associated with the technical assistance contracts.

How the Administration of the Port of Lisbon and Capgemini Worked Together

Management of the IT solution is based on a single console which manages the virtualization platform and all hosted servers, increasing APL's technical knowledge and reducing effort.

The biggest challenge for Capgemini, and the determining factor in this project, was to minimize the impact to the end-users. This challenge was overcome through a rigorous migration process and quality testing, which resulted in 100% system availability during the entire project.

"The success of this project was due to three factors," says Fernando Almeida, IT and Communications Director, APL, S.A. "Firstly, due to the project's meticulous preparation, since its initial assessment, having APL and Capgemini elements working together as a team. Secondly, because of the technical capability and experience of the Capgemini team which we realized, from the beginning, as being knowledgeable on the subject which was reflected in every detail. Lastly, on the maturity and robustness revealed by both the chosen hardware and software."

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Capgemini Portugal Public Services IT Transformation Infrastructure Management

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In collaboration with



The Port of Lisbon is a major European port on the Atlantic Ocean. Its geo-strategic centrality confers it a prominent status in the logistics chain of international trade and for the major cruise lines.

The port is a national leader in the movement of ships and occupies the first place on the national ranking regarding the handling of cargo containers and solid bulks of agri-food products. These two types of goods place the Port of Lisbon in the top league of Iberian ports.

More information is available at: **www.portodelisboa.pt**