

# A NEW LIGHT IN PORTUGUESE HEALTHCARE

Dell works with private healthcare provider to build a hospital of excellence and innovation in Portugal



Portugal's healthcare reforms in 2002 created a new market for private healthcare providers. Forward thinking firms took the opportunity to create new, sophisticated healthcare facilities with cutting edge IT infrastructures designed to give health professionals the facilities and information they need to save lives.

## SOLUTIONS:

- DATA CONSOLIDATION AND MANAGEMENT



## CUSTOMER PROFILE

**COMPANY:** Hospital da Luz –

Espírito Santo Saúde

**INDUSTRY:** Healthcare

**COUNTRY:** Portugal

**FOUNDED:** 2006

**EMPLOYEES:** 1,600

**WEBSITE:** [www.hospitaldaluz.pt](http://www.hospitaldaluz.pt)

## CHALLENGE

Espírito Santo Saúde wanted to partner with an IT solution provider to help it build its infrastructure for a new, technologically advanced hospital. Espírito Santo Saúde needed an end-to-end solution from design to final deployment.

## SOLUTION

Dell Global Infrastructure Consulting Services helped design and build the Hospital da Luz, a global solution that involved Dell products, including various PowerEdge servers.

## BENEFITS

### Get IT Faster

- A provider with a complete solution
- A modular solution that grows without stoppages

### Run IT Better

- Optimisation of costs, in an infrastructure that serves nearly 15 units

### Grow IT Smarter

- Blade servers take up to 70 per cent less space in the datacentre
- Easy, standardised maintenance cuts operating costs by 40 per cent



Espírito Santo Saúde group is a private healthcare provider that runs 15 facilities across Portugal. It wanted to build a new flagship hospital in Lisbon to incorporate the latest technical advancements, and act as a reference for others across the country. As such, the Hospital da Luz in Lisbon was conceived with one clear purpose – be the most advanced healthcare centre in Portugal.

This was no simple task, as David Vieira, director of IT and communications infrastructures at the Espírito Santo Saúde group found when he was tasked with designing and building the IT environment for the new facility from scratch. This would be the largest and the most complex IT project that the Espírito Santo Saúde group had undertaken, so David Vieira started looking for an IT solution provider to partner with on the project. David Vieira explains, “This was a huge project for us and we needed the help of a partner experienced in building large scale solutions. We were looking for technical support at every stage – from concept to completion.”

The Espírito Santo Saúde group sent a request for proposals to several solution providers, before choosing Dell. The group had worked with Dell on previous projects and had established a strong relationship

with the team in Portugal, but it was a visit to the Dell Solution Innovation Centre in Limerick that convinced Espírito Santo Saúde. Here he saw the extent of Dell commitment to optimised processes and discovered that Dell was as excited about the new project as he was. “Dell believed in this project from day one. At the Dell Solution Innovation centre, we saw how much we could achieve and Dell saw the potential of the new hospital. Dell stood by us every step of the way.”



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David Vieira, director of IT and communications infrastructures, Espírito Santo Saúde

### HOW IT WORKS

#### HARDWARE

- Dell PowerEdge™ M600 blade servers with Intel® Xeon® 5440 series processors
- Dell PowerEdge M1000e modular blade enclosure
- Dell PowerEdge 6850 / 2950 / 1955 servers
- EMC CX3-40 storage arrays
- Dell PowerVault™ ML6030 tape libraries

#### SOFTWARE

- Altiris Systems Management
- Dell OpenManage™ Systems Management
- IT Assistant
- VMware® ESX Server Software

#### SERVICES

- Dell Global Infrastructure Consulting Services
- Dell Education Services
- Dell ProSupport for IT
  - Mission critical

The Espírito Santo Saúde group and Dell set about building the Hospital da Luz in Lisbon, with Dell technology at the heart of the infrastructure. Dell Global Infrastructure Consulting Services met with Espírito Santo Saúde and together they mapped every technological element of the new hospital. The datacentre runs a variety of Dell servers including PowerEdge™ 2950s, PowerEdge 1955s, as well as PowerEdge 6850 servers. For storage the hospital uses EMC CX3-40 storage arrays and a Dell PowerVault™ ML6030 tape library. The technology in the Hospital da Luz is covered with Dell ProSupport for IT with four hour mission critical response. David Vieira says, “We didn’t look at components individually, but as constituents of a larger and more complex

solution. Dell consultants helped us select the most appropriate technology for each of these.”

A team from Dell Deployment Services was involved at every stage of the infrastructure’s development including:

- A series of meetings with the Espírito Santo Saúde group to define the final solution
- Dell supported the Espírito Santo Saúde team in selecting the most appropriate hardware for its needs
- Dell technicians trained the datacentre management team
- The IT infrastructure was deployed on time and within six months

**“THE DELL POWEREDGE M600 BLADES ARE WELL DEVELOPED BUT ALSO HAVE AN IMPRESSIVE DENSITY. THESE SERVERS TAKE UP ABOUT 70 PER CENT LESS SPACE IN THE DATACENTRE THAN STANDARD RACK SERVERS.”**

David Vieira, director of IT and communications infrastructures, Espírito Santo Saúde



David Vieira says, “The experience of Dell’s technicians was very important to us, not only during the implementation, but also for our team training.” Dell provided Espírito Santo Saúde with training on the server infrastructure as well as every component of storage arrays and continues to advise Espírito Santo Saúde on the infrastructure.

In a second phase of growth, the Hospital da Luz needed new servers to work with Oracle Real Application Clusters (RAC) and Microsoft Exchange Server 2007. Together, Espírito Santo Saúde and Dell analysed the existing infrastructure and planned for new additions giving special consideration to the rapid growth of the datacentre, space available, and energy consumption. The hospital needed servers that could connect to the existing SAN, but also be ready for virtualization when required.

Dell PowerEdge M600 blades housed in a Dell PowerEdge M1000e modular blade enclosure were the perfect fit. The team at Espírito Santo Saúde deployed the blades using the Altiris Deployment Solution and use Dell OpenManage software to administer the blades. David Vieira says, “The Dell PowerEdge M600 blades are just what we needed. The modular design suits our expansion and when appropriate, we’ll implement blade technology across the datacentre.”

#### **TECHNOLOGY IN THE SERVICE OF HEALTHCARE PROVISION**

The result of the group’s investment in the Hospital da Luz is a significantly improved service for patients. For example, the Hospital has an electronic clinical

information system. Results analysis, examinations, digital imaging and every other piece of patient data is stored on the centralised storage solution and is instantly available to doctors, without the need for hard copies. Vieira says: “The clinical team can access information faster at any place and at any time. The high standard of medical care that our patients receive is a result of the technological support provided by this infrastructure.”

#### **BLADES OCCUPY 70 PER CENT LESS SPACE IN THE DATACENTRE**

Vieira found that the philosophy behind Dell’s blade servers, matched the infrastructure at the Hospital da Luz perfectly. “The Dell PowerEdge M600 blades are well developed but also have an impressive density. These servers take up about 70 per cent less space in the datacentre than standard rack servers.” This extra space will be put to good use as Espírito Santo Saúde plans to take advantage of the blade enclosures modular design and snap-in scalability, to add new servers in the coming months, as the hospital deploys new solutions and supports new health units. When new servers are added, Vieira knows that this will be a fast and hassle-free process, as he explains, “It’s simple to deploy and manage these servers. The Altiris Deployment Solution that comes with the Dell PowerEdge M600 blades cuts deployment time by 50 per cent.”

#### **AN INFRASTRUCTURE TO SERVES 15 LOCATIONS**

The new IT infrastructure allowed Espírito Santo Saúde group to offer IT services from the Hospital da Luz to other of the group’s units. These clinics benefit from the extra resources and stability that the datacentre

at the Hospital da Luz provides. David Vieira says, “There are now 15 other facilities using the resources that we built at this hospital, which helps us cut hardware and maintenance costs. This is only possible because of the high confidence we have in the infrastructure that Dell built.”

#### **AN ONGOING PARTNERSHIP WITH DELL**

For Espírito Santo Saúde, Dell’s support team is key to the success the Hospital da Luz has achieved. The fact that Dell coordinated each component of the infrastructure – from design to deployment – eliminated the need for Vieira to source and manage multiple suppliers or contractors. With Dell ProSupport for IT, they can rely on a rapid response to unplanned downtime and fast access to expertise on issues like virtualization and systems management. David Vieira says: “Everyone in the team has been impressed with Dell ProSupport. This gives us confidence in the day-to-day management of our infrastructure.”

Dell’s efficient delivery system and rigorous commitment to deadlines added to an already strong relationship with Espírito Santo Saúde that continues to this day. “Working with Dell directly eliminates the need for middle-men and multiple third-party firms. This reduces time spent on phone calls and paperwork due to a single point of contact and standardised processes for support. This helps us to plan more effectively and saves us time in the long-run.” says David Vieira.

# “WE NEEDED A SUPPLIER THAT WOULD PROVIDE US EVERYTHING, FROM THE SERVERS AND STORAGE AND OTHER HARDWARE ACROSS THE INFRASTRUCTURE. WITH DELL, WE HAVE A COMPLETE SOLUTION.”

David Vieira, director of IT and communications infrastructures,  
Espírito Santo Saúde

## A PROVIDER WITH A COMPLETE SOLUTION

Dell technology is at the heart of the Hospital da Luz and David Vieira believes that working with a provider that has a complete solution is a key benefit. “The advantages of choosing Dell as a supplier are the excellent price/performance, the consistency of maintenance and the reliability of the hardware.” David Vieira adds: “We needed a supplier that would provide us with everything, from the servers and storage and other hardware across the infrastructure. With Dell, we have a complete solution and the ongoing service and support we

receive is second-to-none. Today, people come from all over the world to see our Dell infrastructure.”

**For more information on this case study or to read additional case studies, go to [www.dell.com/casestudies](http://www.dell.com/casestudies) and [www.dell.pt](http://www.dell.pt)**

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