

CASE STUDY

SAÚDE 24 – PORTUGAL'S HEALTHCARE HOTLINE

»THE REDESIGN OF THE SAÚDE 24 INFRASTRUCTURE WAS A REAL EMERGENCY FOR US, BUT FUJITSU CAME TO THE RESCUE WITH A QUICK, RELIABLE SOLUTION.«

António Marques, IT Manager, Linha de Cuidados de Saúde (LCS)



FLU EPIDEMIC OVERLOADS HEALTHCARE HOTLINE

Saúde 24, a public-private partnership initiated by Portugal's Minister of Health, plays a key role in the national healthcare system. The purpose of this initiative was to provide efficient, economical country-wide access to healthcare services. In public health emergencies, when summer heat becomes oppressive or when a new wave of flu strikes, the healthcare hotline – which also supports access by fax, e-mail or online chat – is the most important point of contact. Saúde 24 health advisors rely on advanced information technology to provide advice and information on healthcare issues and services around the clock.

The recent outbreak of the H1N1 virus showed how much the country had come to rely on this service. A flood of additional inbound calls quickly pushed Saúde 24 to the limits of its planned capacity. Not only were there not enough hotline workstations to handle the deluge of queries, the data center's systems were also having difficulties handling the load. That's when Saúde 24's IT decision-makers decided to take action and revamp the entire healthcare hotline infrastructure within a time frame of only a few weeks. "In particular, our data center's power supply was seen as a problem, if we needed to expand the infrastructure. We were using all the available power and there was no way to change the situation quickly," recalls António Marques, IT Manager of Linha de Cuidados de Saúde (LCS).

SAÚDE 24 OPTS FOR GREEN IT FROM FUJITSU

In order to acquire the capacity to handle the flu wave as quickly as possible, Saúde 24 decision-makers turned to a tried and tested tandem – Fujitsu for the IT solution and Siemens for the telecommunication side. Plans called for targeted expansion of the IT infrastructure to boost performance and achieve significant improvement in terms of energy efficiency. FUTRO Thin Clients were installed as additional hotline workstations, a PRIMERGY BX900 Blade Server for the data center's server-based computing environment and PRIMERGY RX300 Rack Servers for database operation. Saúde 24 also expanded the storage capacity by an additional 4 terabytes with an ETERNUS DX80 disk storage system that is backed up by an ETERNUS LT40. Fujitsu completed the entire project, including everything from initial planning to start-up, within only a few weeks. That's all it took to put the necessary resources in place and enable Saúde 24 to provide 24/7 assistance and advice concerning the H1N1 virus and other healthcare issues. Since the new infrastructure features outstanding scalability at low cost, Saúde 24 can now also count on the same high level of reliability in the future.

THE CUSTOMER

Saúde 24 is a public-private partnership initiated by Portugal's Minister of Health that give the country's entire population a central point of contact for healthcare information. www.Saude24.pt



THE PROJECT

Expansion of the infrastructure for Portugal's healthcare hotline made necessary by the upsurge in demand for assistance and advice due to outbreaks of viruses like H1N1.

THE SOLUTION

Design and deployment of a solution for the modernization of the entire IT infrastructure used to operate the healthcare hotline. Systems:

- FUTRO Thin Clients
- PRIMERGY Blade and Rack Servers
- ETERNUS disk storage systems

BENEFITS FOR THE CUSTOMER

- Expansion of the Saúde 24 healthcare hotline within a very limited time frame
- 100% increase in data center performance
- Guaranteed high-availability operation
- Reduction of power consumption by half
- Lower IT operating costs
- Increase in IT operational productivity
- Quick, economical scalability of the entire IT infrastructure at any time

HARDWARE, SOFTWARE, SERVICES

- Services: Planning and design of the solution, installation and integration of systems, maintenance
- Servers: 1 PRIMERGY BX900 Blade Server system with 10 PRIMERGY BX920 Server Blades, 2 PRIMERGY RX300
- Thin Clients: 40 FUTRO A220 and SCENICVIEW B17-5 monitors
- Storage: ETERNUS DX80
- Backup: ETERNUS LT40, Backup Exec
- Database: SQL
- Server management: ServerView Operations Manager, ServerView Virtual-IO Manager, ServerView Deployment Manager
- Application landscape: Healthcare-related applications, Citrix XenApp Advanced

FUJITSU EQUIPS SAÚDE 24 TO HANDLE THE FLU WAVE IN A MATTER OF DAYS

When it became obvious that it would be necessary to expand the capacity of its healthcare hotline as quickly as possible following the outbreak of the H1N1 Virus, Saúde 24 had to address a basic problem: the data center's power supply had turned out to be a bottleneck. This was a problem that could not be solved in the short term, which meant that simply adding server and storage resources was not a viable option. According to António Marques, "A complete redesign was the only quick way to obtain the required increase in performance and at the same time achieve significant improvement in terms of energy efficiency." Fujitsu produced a solution within just a few days – a dynamic infrastructure for both the data center and the healthcare hotline workstations.

PRIMERGY industry-standard servers represented the key component of the Saúde 24 dynamic infrastructure. The PRIMERGY BX900 Blade Server system, which can accommodate up to 18 server blades, gave Saúde 24 top performance density and advanced I/O capacity to application virtualization. At the same time, the system's efficient energy and cooling design permits substantial energy savings. Ten PRIMERGY BX920 Server Blades were initially installed with Citrix XenApp for the application environment, which left substantial room for future expansion. Two PRIMERGY RX300 guarantee high performance, reliability and energy-efficient operation of the Saúde 24 SQL database. ETERNUS DX80 disk storage with a high-speed Fibre Channel connection also complements the server environment. The disk storage system not only permits a high level of business continuity and data availability, but also supports innovative functionality; for example, administrators can dynamically move data or spin drives down to save energy, and cache content is secured to flash memory in the event of a power outage. In addition, ServerView Operations Manager ensures low service costs and high availability. This management solution monitors the server and storage environment of the healthcare hotline around the clock, permits early detection of errors and supports integrated diagnostic and administrative functions that take over tasks that would otherwise have to be performed by IT personnel, for example, when starting up individual servers or groups of servers, which Saúde 24 has automated with ServerView Deployment Manager.

ServerView Virtual-IO Manager is yet another example. It lets Saúde 24 manage the virtual servers in its environment, permits more dynamic use of resources and ensures quick, reliable failover in the case of a server outage.

Saúde 24's new workstations now feature exceptional reliability and energy efficiency. Since the Thin Client FUTRO A does completely without components such as fans or hard disks, users benefit from a high level of protection against outages, low operating costs and silent operation. Of course, the skilled personnel who man the hotline phones appreciate those benefits since they can concentrate on callers' problems.

DYNAMIC INFRASTRUCTURE – GREEN IT FROM FUJITSU

"The H1N1 virus had alarmed the entire country – and that of course increased the pressure on us to make sure the project was a success," says António Marques. "That made it all the more important for us to be able to count on our IT partners 100%. Since we had had good experience with Fujitsu in the past, we also decided to work with Fujitsu in this emergency situation." And here's what he had to say about the solution:

"THE SOLUTION FUJITSU DELIVERED WAS ABSOLUTELY PERFECT FOR US. WE WERE ABLE TO DOUBLE PERFORMANCE, MAINTAIN AROUND-THE-CLOCK AVAILABILITY, CUT POWER CONSUMPTION BY HALF AND REDUCE OPERATING COSTS. AND WE WERE ABLE TO DO ALL THAT QUICKLY AND ECONOMICALLY."

Saúde 24's António Marques expressed his satisfaction with Fujitsu's performance: "To plan a project like this and then carry it out without any problems under time pressure was already quite an accomplishment. And the fact that Fujitsu also managed to do it on budget is really impressive."



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