

Case Study Cannizzaro Hospital

» Client virtualisation means we can achieve a high level of fault tolerance to ensure maximum efficiency in critical areas. Hence, cost and consumption savings in the medium term «

Giuseppe Digeronimo, IT and Telephone Service Manager, Cannizzaro Hospital



The customer

Cannizzaro Hospital, located on the slopes of Mount Etna, is an Italian Grade III facility specialising in medical emergencies and provides a full range of diagnosis, therapy and rehabilitation services. The hospital's 34 departments and general patient services rely on state-of-the-art medical equipment in outpatient units and laboratories. The 800 workstations connected to the hospital network are managed by the technology infrastructure via 50 servers dedicated to systems and applications, with an optical fibre backbone that connects the five main buildings.

Objective

The ever-growing need for management and application solutions, together with the shortage of IT staff responsible for the management and maintenance of an infrastructure that serves about a thousand users, has long suggested the search for solutions to optimise the work of the technical resources available would be necessary. Moreover, this would result in savings in operating costs and fuel consumption. Workstation virtualisation was a crucial step in this direction so in 2011 the A&E department, with its 200 daily admissions, was designated for a pilot scheme. *"Every PC failure, even something simple, meant at least three hours of downtime for the outpatient unit involved, with obvious issues for healthcare staff and patients,"* explains Giuseppe Digeronimo, IT and Telephone service manager at Cannizzaro Hospital.

Approach

After the three-week trial, Cannizzaro Hospital management decided to install the Zero Client package from Fujitsu Technology Solutions. In a short time all ten workstations in the A&E department were replaced by DZ22-2 for VMware virtual desktop devices and two MZ900 portable devices for working remotely. The system is managed by a Fujitsu BX400 Blade Server to ensure operational efficiency and that the required redundancy is met. Moreover, the success of the trial paved the way for extending the solution to other hospital departments.

THE CUSTOMER

Country: Italy
Sector: Healthcare
Employees: 1,400
Website: www.aocannizzaro.it



CHALLENGE

The efficiency of a health facility relies on the correct functioning of the technology that underpins patient services and care. In the case of Cannizzaro Hospital, a regional facility specialising in emergency treatment for all of Sicily, the A&E department has 200 admissions daily and needs operational continuity. This was not always guaranteed by traditional PCs, prone to frequent faults and lengthy repair times.

APPROACH

Fujitsu Technology Solutions supplied Zero Client technology that proved to be ideal both for eliminating workstation maintenance costs and for minimising operating faults. With the support of Fujitsu's partner, DSI Sistemi, Cannizzaro Hospital has replaced all A&E PCs and estimates it will effectively halve infrastructure costs over a three-year period.

THE BENEFIT

- Decrease in possible faults and drastic reduction of workstation repair times
- Elimination of maintenance costs
- Annual energy costs estimated to be five times lower
- Simple deployment to other hospital departments

THE PRODUCTS

- Fujitsu PRIMERGY BX400 Blade Server
- Fujitsu Zero Client DZ22-2
- Portable Zero Client MZ900
- VMware vSphere FX 5.0 virtualisation environment
- Warranty to cover overall product reliability

Business benefits

It was the quick recovery after downtime that persuaded Cannizzaro Hospital to adopt Fujitsu's Zero Client solution as well as the tangible economic advantages seen in the medium term and the suitability of the solution for other departments. *"The range of possible faults has decreased dramatically,"* says Digeronimo, *"and with virtualisation we can restore a workstation in minutes."*

The fact that devices have no operating systems or mechanical components is a great advantage, as is the presence of local-level data. This means that start-up times are immediate and there is no need to update any local hardware or software. Security (data is centralised and cannot be hacked by an outside source) and energy-saving are also significant factors. In a public health facility like Cannizzaro Hospital, electricity costs are very much an issue as they can account for 1% of total budget. Simply replacing ten PCs with as many Zero Client devices will not have a significant impact, but estimates made by IT experts showed annual energy consumption will decrease around fivefold compared to using traditional computers. As a result, savings will become significant when projected over the medium and long term, especially when considering a greater number of workstations. In three years the Zero Client solution, including the purchase of the Blade Server, will halve overall consumption and maintenance costs. Moreover, a Zero Client device life cycle is far longer than that of a standard PC.

Consequently, the initial Fujitsu BX400 Blade Server installation will pave the way for extending technology to other departments, like appointments, admissions and administration offices. The implementation phase of the VDI solution had no substantial impact on the running of the A&E department. *"Medical personnel were involved right from the trial stage, so we could verify the effects of migration, and it was clear they didn't even need special training,"* says Digeronimo. *"Nonetheless, the actual implementation was done step by step and PCs continued to function in parallel with the virtual system until they were all replaced, but this still only took a month."*

Breakdowns became a thing of the past as far as workstations were concerned and this brought real improvements in the quality of service for medical and nursing staff, and also for patients.

The partner's role

The Zero Client solution was discovered thanks to an event organised in 2011 by DSI Sistemi, a Fujitsu partner based in Palermo. The company has become the technology partner to Cannizzaro Hospital and has worked closely with the staff right from the trial stage. Despite its past experience being mainly in the large-scale retail sector, DSI Sistemi sensed the potential for replicating this solution in public health facilities, so it began to make contact with similar services in Sicily. DSI Sistemi was also able to leverage its expertise in the VMware environment, both in implementing the solution in the Cannizzaro A&E department and in organising training courses within the facility.

Conclusion

Desktop virtualisation for Cannizzaro Hospital A&E department was initially implemented to relieve the overstretched IT personnel of workstation management and maintenance tasks. Subsequently, Fujitsu's Zero Client solution proved to have a number of advantages for other departments as well as A&E as it can generate substantial savings in the medium term, including 50% savings in overall client management and 60% in energy consumption. Cannizzaro Hospital has already been praised by JCI (Joint Commission International) for its A&E department software management, and the reduction in faults will certainly enhance the quality of its service and reputation.

"The Zero Client solution has been the best way to achieve cost reductions and improve quality of service, since we were able to keep workstation faults to a minimum."

In collaboration with



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