

Case History



IT shapes up with the Thin Client PRAIM



Luca Giobelli,
Information system service director of
Integrated University Hospital Authority of Verona

Among the first realities of the Italian and European health board, the hospital of Verona has chosen Thin Client manufacturer PRAIM to replace over 1000 PCs, guaranteeing centralised management with the Thin Man console.

Second in Italy for number of beds, fifth for number of patients. The Integrated University Hospital Authority of Verona is an institution of international importance, whose numbers speak for themselves: every day there are three thousand casualty patients, one hundred operations, four hundred A&E entries, two hundred and eighty day hospital entries, ten births. In 2010, two hundred transplants were carried out, between heart, liver, kidney, & bone marrow. A volume of activity that the hospital supports with its eighty-four operative units (almost all ISO 9001:2008 certified, six in progress of certification), sixteen complex services, almost one thousand four hundred beds (more than 138 in the day hospital). Without forgetting the contribution given by technology: boasting state-of-the-art machinery, a number of first-rate activities are carried out, such as Vascular Neurosurgery and Stereotaxic Radiosurgery and Neurosurgery.

The Hospital Authority is a Regional Cystic Fibrosis Centre, for the diagnosis, treatment and research for this and other rare diseases of the respiratory, gastroenteric and immunological systems. Furthermore, it hosts the Pancreas Centre, specialised in illnesses of the pancreas, and the Bone Marrow Transplant Centre, a reference point on both national and European levels. Within the research ambit, Verona's IUHA boasts a stem cell laboratory equipped with a Cell Factory, ARC-NET, the only Italian centre involved in the International Cancer Genome Consortium, a worldwide project that aims to produce the genome sequence of various types of cancer and Italy's first Experimental Robotic Surgery Centre, which was opened recently. So, a high technology level that is exhibited not only in the research ambit, but also within the IT infrastructure activities of the hospital and its five thousand employees who are active in the various operative units.

The hospital is equipped with a set of PCs that now counts around a thousand units. "But the management of the work stations based on the classic paradigm of the PC has shown itself, over the years, to be very weighty in terms of costs and time", says Luca Giobelli, manager of the Information Systems service. Moving towards innovation, the hospital had for some time already virtualised the server side, so virtualising the desktop as well was a natural solution to this sort of problem. "The possibility for an initial pilot project came up when the Integrated University Hospital Authority became leader of the province in the management of the intercompany department of transfusion medicine, taking on the task of managing all the work stations present in the fifteen centres spread over the area".



Praim XT9000-C and XT9050-A



In search of cheap devices that are also simple to configure

“The virtualisation of the work station may be implemented according to two different approaches: VDI or applied virtualisation,” Giobelli continues. “Of the two, we chose the second, in particular we went in the direction of Citrix’ XenApp technology which, after an initial comparison proved the most promising.” Client research, on the other hand, was carried out analysing solutions already used in similar realities, in particular the ASL (Local Health Centre) 7 of Pieve di Soligo.

There were various guide parameters: the hospital was looking for a device that was simple to configure and easy to replace, as well as small in dimension and consumption; what was needed was the availability of a support device that was able to take on any problems in implementing the solution; the operative system had to be free of licences.

“We tried sample stations from various manufacturers,” Giobelli says, “and our final choice was eventually the XT9000-C model with Thin OX operative system manufactured by PRAIM. The PRAIM device satisfied the requirements perfectly. We also positively evaluated the possibility of having a partner nearby and who, from the very beginning, showed themselves to be attentive of our specific needs. Compared to the competitors, they showed us a reactivity that convinced us that we would be able to receive answers in short time to the difficulties that every good project must take into account.

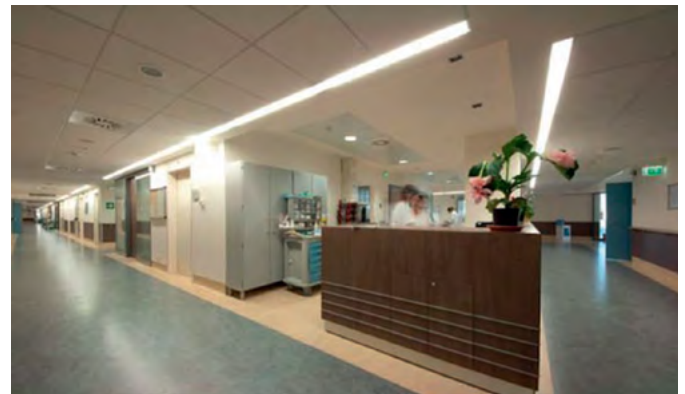


Working as a team to face specific needs

The implementation phase is divided into two parts. The first is the pilot project described above, and the second phase is that of the mass introduction of technology that occurred contemporarily with the activation of the new Confortini Surgery Centre, where a lot of work has been carried out on the XenApp side supplying a standard work station, based on a published desktop and the virtualisation of more than sixty applications between office, health and management. Overall, the project is complex and has had to answer a lot of boundaries and needs.

“All the partners involved have shown themselves to be professionals,” says Giobelli, “and they have allowed us to successfully implement the project. For example, there was no shortage of difficulties during the implementation phase: it emerged that the official Citrix receiver for Linux (used by ThinOx) had a bug in the large quantity CD/DVD data reader. This was a big problem for us as the thin clients are also used to view x-rays saved with standard DICOM on CD/DVD. Working together, we were able to trace the problem found directly to Citrix. Citrix then issued us a patch which was quickly integrated in the firmware by PRAIM, in time for the stations deploy”.

And so the final installation phase started for the Confortini Centre: almost 1250 stations in all, even if in the second phase we chose the PRAIM XT9050-A model, smaller but with slightly better performance than the previous one. “Together with PRAIM we studied a kit that allowed assembly behind the monitor with VESA MIS standard, thereby freeing up space on our increasingly blocked desks”.



Benefits: better management

Therefore, a large scale implementation that has brought with it, besides the virtualisation of data and applications, the possibility of having a series of new generation stations that offer a number of benefits for both the IT department as well as for the final user.

“With a higher number of stations, it is fundamental that you also have a centralised management tool,” Giobelli explains. The hospital has implemented ThinMan, an administration console for the centralised management of all the Thin Client PRAIM. An important step forward for the hospital. “On one hand the help desk can intervene remotely on the station if there are any problems, on the other the updating and configuration, as well as the management of different profiles, have all become simple operations.” In fact, Thin Man allows the management of devices in groups with specific characteristics, organised based on the physical disposition of the devices or based on specific intervals of IP addresses, with the possibility of configuration, updating and automatic actions for groups and according to the policies pre-set by the IT.



Other benefits: savings and agility in work

Nevertheless, there have been numerous advantages of the Thin Client PRAIM: “Even though there is no specific monitoring of the electrical consumption of the work stations, there is however a general attention for the activity costs of which electrical consumption in one. We have made some estimates and the energy savings in percentages compared to the classic work stations is really quite significant”. So a “green” evolution as well, in addition to the many other benefits such as the possibility of replacing the thin clients in a very short time, reducing inefficiency to a minimum in the event of failure. Furthermore, all the data is conserved in the centralised storage with well-defined and -managed backup policies.

“Without forgetting work agility: today, the user can work with his own environment regardless of the physical work station that he is using”. The hospital is now continuing the adoption of thin clients: almost all of the obsolete workstation replacements or new stations are based on the thin client platform. “We expect a reduction in the number of tickets for problems linked to the stations and a decrease in management costs in general,” Giobelli concludes.



The company	<i>Integrated University Hospital Authority of Verona</i>
The needs	<i>To lower costs and maintenance times of a PC park of thousands of units, thereby improving the efficiency of the management</i>
The solution	<i>Virtualisation of the desktops with thin client PRAIM XT9000-C and XT9050-A (operative system: ThinOX). Management from a single point with the PRAIM ThinMan console</i>
The benefits	<ul style="list-style-type: none"> • <i>Centralised and flexible desktop management</i> • <i>Simple configuration, updating and management activities for the various profiles</i> • <i>More capable Help Desk activities with a reduction in inefficiencies</i> • <i>Higher agility at work thanks to the possibility of working with your own environment from any workstation.</i>