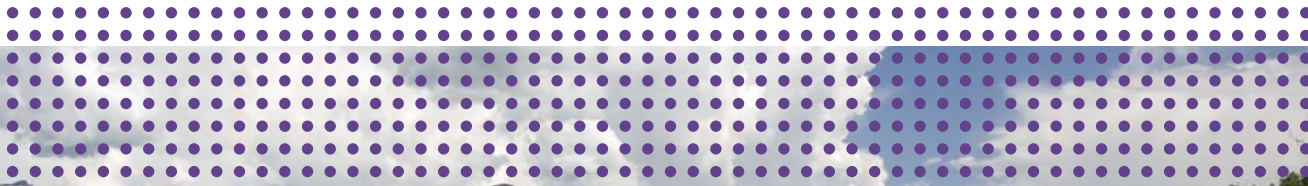




Case study • Healthcare



NEXTIRAONE AND ALCATEL-LUCENT WORK TOGETHER TO MAKE ANNECY REGIONAL HOSPITAL A CUTTING EDGE HEALTHCARE CENTER



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NextiraOne and Alcatel-Lucent have managed one of the largest voice/data/multimedia IP solution rollouts in France at Anancy Regional Hospital



The new Regional Hospital in the city of Anancy in France is a resolutely modern hospital. Everything has been designed to cope with the current challenges of population ageing, treatment accessibility, cost control and enabling healthcare to remain 'human' in the face of increasing technological developments, in the best conditions that a hospital can offer. New technologies have been integrated into its infrastructure from the outset with one primary aim, namely managing and sharing essential information so that patients receive effective treatment and enjoy improved quality of life in the hospital. NextiraOne and Alcatel-Lucent joined forces for this project in order to develop and integrate solutions that were adapted to the healthcare sector.

CHALLENGES

- Install a high performance and homogenous communications infrastructure enabling the hospital to work on innovative projects
- Offer patients a genuine information service
- Guarantee communications continuity and availability in a context of high mobility

SOLUTIONS

- 120 DECT consoles (for 800 DECT terminals)
- 1,420 IP voice or multimedia terminals: 800 Alcatel-Lucent IP-phones; 620 patient terminals including Lincor's Medivista software (integration completed in partnership with Netlogon)
- 300 analogue phones mainly for technical rooms
- Alcatel-Lucent LAN: 2 redundant switches for the network core and 110 switches for distribution and the periphery (over 3,500 activated ports out of 5,000 available ports)
- Telephony: Alcatel-Lucent IPBX (**OmniPCX™** Enterprise)
- Single messaging system, Mobicall alarm management
- 13 remote sites connected via secure links
- Network security: 802.1x, intrusion detection system, double DMZ, content and traffic monitoring

BENEFITS

- A sustainable and flexible infrastructure enabling new usages to be integrated in future
- Mobility resources enabling performance and staff protection to be improved
- Patient access to their medical information and leisure activities, improving their quality of life in hospital

A NEW WAY OF ORGANIZING PATIENT CARE

With 652 beds, Annecy Regional Hospital is the largest healthcare center in the Haute-Savoie region of France. The 2,400 hospital staff will receive nearly 70,000 patients per year and manage over 40,000 visits to the Emergency Department.

Over fifteen years of reflection and project work were required before this new hospital, which was opened in 2008, saw the light of day. "This is because the way the hospital was designed involved innovative features at various levels," explains Serge Bernard, Hospital Director. "First, the architecture is completely original, making the best use of the geographical site and organizing the building into 'streets' dedicated to staff, patients and the general public. Second, in terms of the medical side of the project, the hospital's regional responsibilities have been considered, as have urban planning issues, and care has been taken to make sure that information can be shared with other organizations. Finally, we conceived of a totally new way of managing the hospital process alongside the industrial process, in order to take all aspects of patient care into consideration and to free up more time for care staff. This is where the use of new information technologies enables us to use resources that aren't usually used in a hospital setting and to therefore lead the way in France. In our establishment, we offer quality of care, security and an approach to treatment that is completely medicine- and patient-focused. The key to such performance lies in connecting all of the information processes together, from the multiplay patient screens to the digital processing of the drug chain to the archiving," continues Mr Bernard.

A COMPLEX AND AMBITIOUS CALL FOR TENDERS

The hospital launched a call for tenders in 2006 for its communication infrastructure; it envisaged something effective and homogenous in order to support its innovative projects relating to patient services in particular. This architecture also had to fit in with security constraints without hindering the availability of communication resources that are essential in an environment where mobility is a key concern. This project was part of an over-arching hospital project that aimed to have an integrated IT system based on a single patient file. "It was a very ambitious project including many technical challenges that had to be overcome in order to meet the needs of both patients and care staff," explains Claude-Henri Tonneau, Information Systems Department (ISD) at Annecy Regional Hospital.

From a concrete point of view, the hospital wanted the infrastructure to help staff become more effective: secure access to most software packages and patient files (e.g. diagnostics, x-rays and medicines) from patient terminals installed in each room;

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Serge Bernard,
Hospital Director, Annecy Regional Hospital



access to the hospital’s portal (intranet) based on a synchronized directory; shared tools (a single messaging system); and automated pharmacy management. The project also had to take account of mobile staff members’ (doctors, care workers and technicians) specific needs by making information on alarms, alerts and emergency calls available on a mobile terminal connected to the infrastructure. The system also had to offer multimedia communication possibilities to patients including access to services such as the internet, phone, television, radio, films, video on demand (VoD), games, books and satisfaction surveys.

IN PARTNERSHIP WITH ALCATEL-LUCENT, NEXTIRAONE OFFERED ALL OF THE EXPERTISE REQUIRED FOR THE PROJECT

After the call for tenders, the hospital chose to entrust the entire infrastructure project to NextiraOne using Alcatel-Lucent communication technologies. Foucault de la Rochère, NextiraOne’s CEO: “It went without saying that we would choose Alcatel-Lucent solutions for this hospital project, not only because the two companies have been partners for a long time, but also because the solutions were the best as they offered a robust and sustainable technical architecture that was well suited to the building’s specific geographical layout. We needed high quality equipment in order to cope with the high volume of information exchanges involved in the project.”

Claude-Henri Tonneau explains: “The choice of partner was guided by the overall solution offered. We chose the company that perfectly integrated all of the constraints and enabled the building blocks of the project to be effectively organized.”

LARGE-SCALE ROLLOUT

In an initial phase, NextiraOne designed the voice/data/image network architecture with Alcatel-Lucent including DECT

(Digital Enhanced Cordless Telecommunications) mobile telephony and a hospital communication solution (telephony, messaging etc.), as well as enabling LAN (Local Area Network) rollout. NextiraOne also took charge of project management and training, as well as an operational services contract for incident management.

In a second phase, NextiraOne dealt with the rollout of over 600 patient terminals, which is the largest project of its type in France to date (in terms of the number of terminals involved). This project involves a single multi-use terminal being installed beside each patient bed to provide medical and care staff requirements, patient leisure services, patient medical services, and end of stay quality surveys.

ALCATEL-LUCENT SOLUTIONS ENHANCED QUALITY OF CARE AND IMPROVED QUALITY OF LIFE IN THE HOSPITAL

With this kind of project, patient care is addressed from all angles, greatly benefiting not only patients but also care staff. But it is the overall organizational model that is the most impressive aspect, with its well-adapted horizontal approach to all hospital processes. For Dr Mathieu Debray, Head of the Geriatrics Department, the benefits of the tools are undisputable. “It enables us to reduce paperwork, to have the data we need by patients’ beds and to discuss their treatment with them with full knowledge of the facts, and to prescribe the medicines they need directly. As for patients, they have direct access to their files, as is their right. And in addition, it is interesting and entertaining for all of the people – children and older people alike – we treat in the hospital.” In addition to this highly visible aspect of the solutions implemented, the hospital is very pleased with the project’s overall efficiency and is proud to be using innovative and effective tools such as automated heavy goods transport, as well as the only completely digital pharmacy in France.



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Claude-Henri Tonneau, Annecy Regional Hospital ISD (Information Systems Department)

The value added by NextiraOne and Alcatel-Lucent to this project is clear on five different levels: improved communication flows, effective medical staff, patient services, protection for people and goods, and a high performance and secure network infrastructure and hospital communication.

By using its renovation work as an opportunity to make its regional hospital into one of France’s leading healthcare centers, the city of Annecy has shown that innovation is not just for technophiles. Annecy Regional Hospital is now equipped with tools that are useful for everyone – doctors, patients and nurses. This is why the hospital won the Innovation Prize at the 2008 second Mobility and Convergence Awards.

MANY MODERNIZATION PROJECTS ON THE HORIZON

Annecy Regional Hospital has not finished developing as it has plans to build a psychiatric unit as well as a unit for patients suffering from Alzheimer’s disease. But is this kind of hospital infrastructure feasible elsewhere in both new and old buildings? “It certainly is, and this is why we make large investments in the healthcare sector. In fact, France had lost ground to make up in this area and thanks to the 2012 Hospital Plan, many modernization plans were created: it was therefore an excellent opportunity for us to seize,” explains Foucault de la Rochère. Laurent Rochette, head of the south-east region with Alcatel-Lucent agrees. “Numerous projects are already in the pipeline. Alcatel-Lucent is particularly well placed to act in the healthcare sector, as we are permanently developing innovative healthcare projects using the most high-performance technology in the field with prestigious partners in the US.”



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Foucault de la Rochère, NextiraOne’s CEO

BUSINESS PARTNER INFO

NextiraOne is the leading provider of solutions and integrated infrastructure services that guarantee effective and reliable business communications. They design, install, maintain and support all of their clients’ communications needs from voice, data and video to mobility, security and applications. They provide solutions working with market-leading technology companies.

NextiraOne was created in Europe in April 2002. Between 2002 and 2006 it made a number of acquisitions to strengthen expertise in IP and security technologies as well as extend market presence in strategic markets. In 2008, the NextiraOne group created NextiraOne Experts, a new unit combining consultancy with high-level technical expertise.

With a direct presence in 17 countries, annual revenue in 2007 in excess of 1 billion EUR and around 100,000 customers, NextiraOne is Europe’s leading expert in communications services. The company employs 4,700 people, including over 2,800 experts.

To enable them to provide end-to-end communications solutions for their customers, they have developed a number of close relationships with the world’s leading technology companies including Alcatel-Lucent, Cisco, Genesys and Microsoft.

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