Empowered by Innovation

NEC

Steinfort Intercommunal Hospital

Customer - Steinfort Intercommunal Hospital, Luxembourg

Industry - Healthcare

Challenges - Replacement of nurse call system with further expansion of the application and optimal reachability of the nursing staff

Solution
- iS3000 communication servers
- DECT wireless communications network
- Voice and messaging in one solution
- Mobicall system for intelligent management and routing of calls and alarms

Results
- Full integration with existing telephone system
- Staff is reachable wherever they are and can offer assistance sooner
- Intelligent call distribution
- Patients can be located easily
- Alarm systems and emergency calls integrated in the telephone system

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The Intercommunal Hospital of Steinfort (HIS) is an institution for geriatric care and functional rehabilitation in Luxembourg. It is also a day center for psychogeriatric care. For its communication facilities the institute relies for over twenty years on equipment from NEC and integrator Real Solutions.

Challenge

The HIS had a nurse call system that was obsolete and needed to be replaced. The institution sought a new solution which could be integrated with the existing telephony infrastructure and that could support nursing staff in reacting more swiftly and more efficiently to patient needs.

Solution

To maximise the return on previous investments, HIS chose to extend and enhance the existing system. The institution has been working for twenty years satisfactorily with an NEC telephony system. This system has now been extended to include IP telephony based on NEC's SIP@Net communications server which is connected to the existing system. The HIS also installed a wireless network consisting of 32 DECT radio base-stations and 12 I755 DECT telephones. Along with the new facility the hospital chose to include a MobiCall system by means of which all calls, from searching individuals up to medical alarms and fire alarms, can be easily managed and routed. Mobicall was developed by the Swiss company New Voice and can be fully integrated with NEC's telephone systems and DECT phones. The software controls alarms, emergency calls, localization, mobilization and evacuation. Telephony, wireless communication and alarms are thus an integral part of NEC's solution for voice and messaging.

Results

In an institution like the Intercommunal Hospital of Steinfort the safety of patients is of utmost importance. "We work with people who often are in an advanced stage of dementia. We need not only to care for them but also need to protect them from themselves. We must therefore be swift in answering their calls, offer help immediately when they are in distress and ensure that they do not leave the building unnoticed", says Nico Ollinger, Acting Director of the HIS. There were no more spare parts available for the paging system

of the HIS and when it would break down in future, it could not be repaired. An institution such as Steinfort can not take such risks and therefore decided to renew the pagers and at the same time integrate a number of applications. As a result, the institution now has a new fully integrated telephone facility, by means of which staff is reachable wherever they are and can swiftly provide help. Patients can be located easily and alarms and emergency calls are integrated with the phone system. Everything is provided by one supplier, with obvious benefits. The Mobicall server distributes all incoming calls in an intelligent way to DECT phones or pagers. "We also provide log files, from which additional information can be retrieved if needed. Mobicall has been installed on a virtualized Windows server, independent of the telephony hardware. The telephone facility can connect up to 512 DECT phones. So there is plenty of room for expansion", says Alain Reuter, Account Manager at Real Solutions.

DECT more interesting than WLAN

The HIS switched to a DECT system from NEC. To this end, 32 DECT antennas and 12 I755 DECT phones were installed. The I755 phone is designed specifically for use in demanding environments such as healthcare and is dust-and splash-proof. It also has an alarm signal and an alarm button to offer even more safety. "Wireless LAN was also an option, but that would have been about twice as expensive. DECT is the ideal solution for our institution", says Mr. Wagener, IT director of the institution. All alarm systems in the hospital are connected with the communication server, including the nurse calls, the pagers, the location tracking, burglar and fire alarm.

Reachable everywhere

All patients of the HIS now have a wireless pendant with an alarm button to signal an emergency. They can always issue an alert, whether inside or outside the building. Previously they could only use the (permanent) emergency button in their rooms. Patients of the rehabilitation department are also taught how to use the wireless pendant, which also comes in handy when they return home. If a patient nowadays calls for assistance, nursing staff will now see immediately on their DECT phone or pager where the patient is located. Patients can thus be helped more rapidly.

Currently about thirty employees have a DECT phone, while the others use a pager. "If in future a pager breaks down, we will replace it with a DECT phone. With a pager one can only receive information. The wireless phone will save our staff a lot of time. When a call is placed staff can immediately reassure the patient and answer questions. Previously the nurse had to first go to the patient's room to do so. Now staff can if necessary already bring along something to help the patient", says Nico Ollinger.

Trust

Mr. Wagener: "Real Solutions has been supporting us for over twenty years. In case of problems they always respond and support us quickly. That is a sign of true customer service. We therefore have chosen the same partner to deliver us the hardware and software. If there are problems, we need only make one phone call and we therefore have no reason to switch supplier."

"From the beginning the HIS wanted a solution that would support them well into the future. I have ensured them that this is the case with NEC's technology. Because we now offer them solutions that could be integrated with the system they had purchased previously, we could renew a lot at a very attractive price. And everything works perfectly. So I kept my word for twenty years", smiles Alain Reuter.

Profile

L'Hôpital intercommunal the Steinfort (HIS) is an institution for geriatric care and functional rehabilitation in Luxembourg. It is also a day center for psychogeriatric care. The origin of the institution goes back to 1898 when the city of Steinfort opened a hospital. The present building dates back to 1950. In the 70's of last century the hospital its activities towards rehabilitation physiontherapy, in close collaboration with the Centre Hospitalier de Luxembourg. Today, the institution has 30 beds for acute care admissions and 52 beds for longer stays.