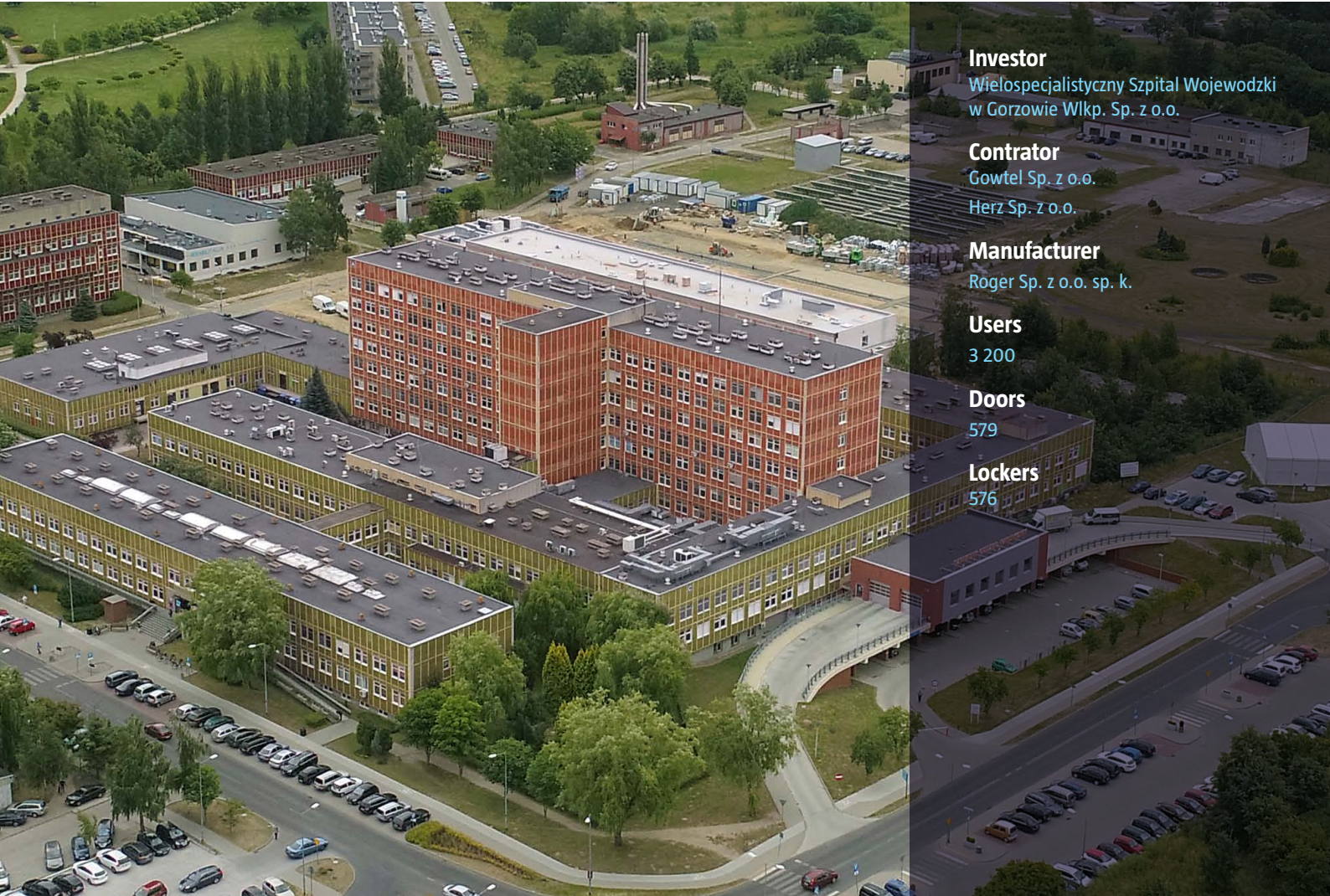


RACS 5 Access Control System at the Multidisciplinary Regional Hospital in Gorzow Wlkp.



Investor

Wielospecjalistyczny Szpital Wojewodzki
w Gorzowie Wlkp. Sp. z o.o.

Contrator

Gowtel Sp. z o.o.
Herz Sp. z o.o.

Manufacturer

Roger Sp. z o.o. sp. k.

Users

3 200

Doors

579

Lockers

576

Established in 1986, a multidisciplinary regional hospital in Gorzow is one of the largest medical centres in the Lubuska region, also chosen by patients from neighbouring provinces and residents from all over Poland. It is a thriving and still developing multi-profile medical centre. It has 33 wards, 30 specialist outpatient clinics and modernly equipped diagnostic facilities providing medical services to more than 50,000 patients and performing almost 20,000 surgical procedures annually. Modernisations of existing laboratories and facilities are underway, and new facilities are being opened to expand the range of care offered to patients.

Requirements

The hospital in Gorzow is a vast facility used by several thousand people every day in a variety of roles. In addition to the patients in the wards and those who visit them, these are also the patients of the outpatient clinics located next to the hospital. Above all, however, it is the staff who ensure the proper provision of medical services and the staff responsible for the proper operation of the entire complex including administration, technical and logistical departments, and external companies – such as cleaning, catering, etc.

The primary objective of implementing an electronic access control (AC) system in the facility was to obtain full 24-hour control over what happens in the facility, to record events (with the possibility of their subsequent verification), and to improve the management of personal traffic in the hospital premises. It was assumed that this should be done in a way that was as automated as possible (controlling access to passageways and doors according to predefined schedules), and at the same time easy and flexible – so that the hospital could change the system's configuration and update the user base on an ongoing basis. An equally important task was to raise the level of security and hygiene standards and to prevent the transmission of the COVID-19 virus.

Initially, access control was intended to cover the entrances to buildings, but the pandemic period significantly expanded its scope. The need to significantly restrict the ability of people to stay and move freely in the facility necessitated the extension of the installation to include indoor passageways and doors.

The aforementioned requirement was to be able to assign user rights in an organised, yet fast and flexible manner. The assigned rights (access to individual passageways) had to be linked to schedules that automated the access process, thus eliminating the need to walk around the facility and lock the doors/passageways and the presence of outsiders in the hospital complex.

The system being implemented at the Gorzow hospital had to provide proximity identification for users in order to eliminate the keypad panels installed to date, which did not work well with the heavy load of entrances handled. Equally important was the fact that the use of proximity identification in the access control system significantly reduces the spread of microorganisms in the facility.

The proximity badge had to allow personalisation (imprinting of employee data) in order to fulfil two roles at the same time: initially, it was used solely as an employee card, and then, once the access control system was in place, the already distributed cards became the proximity badges used for user identification in the access control system.

Solutions

After analysing the solutions available on the market, it was decided to choose the RACS 5 access control system from Roger, a domestic, Polish manufacturer. This was influenced by such factors as the functionality of the system, the stability of its operation (confirmed by realisations in other prestigious healthcare facilities as well as other facilities), the producer's good reputation, and the availability of the product. Attractive pricing and the availability of free technical support were also important. It was felt that these factors would translate into an efficient investment.

The installation of the first doors within the RACS 5 access control system as a pilot was executed at the turn of 2018/2019, serving to gather experience in the use of the system and learn about

its practical capabilities and management. This made it possible to clarify the functional assumptions for its further development, which was carried out with the involvement of local installers.

The implementation of the system began with the introduction of employee badges, followed by the launch of access control at individual entrances. Initially, this covered entrances to buildings at specific times.

The timing of the COVID-19 pandemic accelerated the expansion of the system, forcing the control of individual wards, floors, operating theatres, and staircases, as well as exits and escape routes, in order to limit the possibility of free movement around the facility. In addition to this, the lifts were also controlled, making it possible to clearly separate their use by patients and staff.

The positive experience with door access control prompted the investor to extend the system's scope of application during renovation and modernisation work. It turned out that the RACS 5 system offers the possibility of using MC16-LRC controllers to manage access to cabinets and lockers, which made it possible to extend electronic access control to employees' lockers as well, linking access rights to the badges already in use.

The MC16-LRC controller can work with any electrically operated wired locks. The user gains access to the locker after identification at the reader associated with the locker. It is also possible to configure the system in such a way that a single reader serves many or even all lockers. In this variant, once a user is recognised, the controller analyses his/her rights and opens those cabinets for which he/she is authorised.

The locker system is managed and monitored by the same software as the door access control system. Both solutions use the same database and the same list of users, making the management of users and their access rights to lockers and doors easy and transparent.

The first lockers were covered by electronic access control when the changing rooms were refurbished in early 2022. Currently, all newly installed lockers are integrated into the system.

Among many of the RACS 5 access control system features, there are some specific ones often used in healthcare objects, such as interlocking. The hospital is using the feature with success in dedicated places. RACS 5 system is open for integration with third-party solutions. It enabled the hospital to link via API interface the data obtained from selected readers to an external Time and Attendance (T&A) system.

On most doors and passages the MCT12 readers were installed, in versions with and without I/O lines support (depending on the location and needs), while in representative areas MCT80M readers from the QUADRUS design line were used.

Currently, the RACS 5 system supports 476 doors and 572 lockers used by more than 3,200 users.

The hospital's plans include expansion of the system, which should eventually include another 500 lockers and doors. New ones are being added on an ongoing basis and existing ones are upgraded to become part of the system.

It is also envisaged that medical equipment handling will be integrated into the access control system, allowing it to record who uses it and when.

Multidisciplinary Regional Hospital in Gorzow Wlkp.

RACS 5

Central
management of
access to doors
and lockers

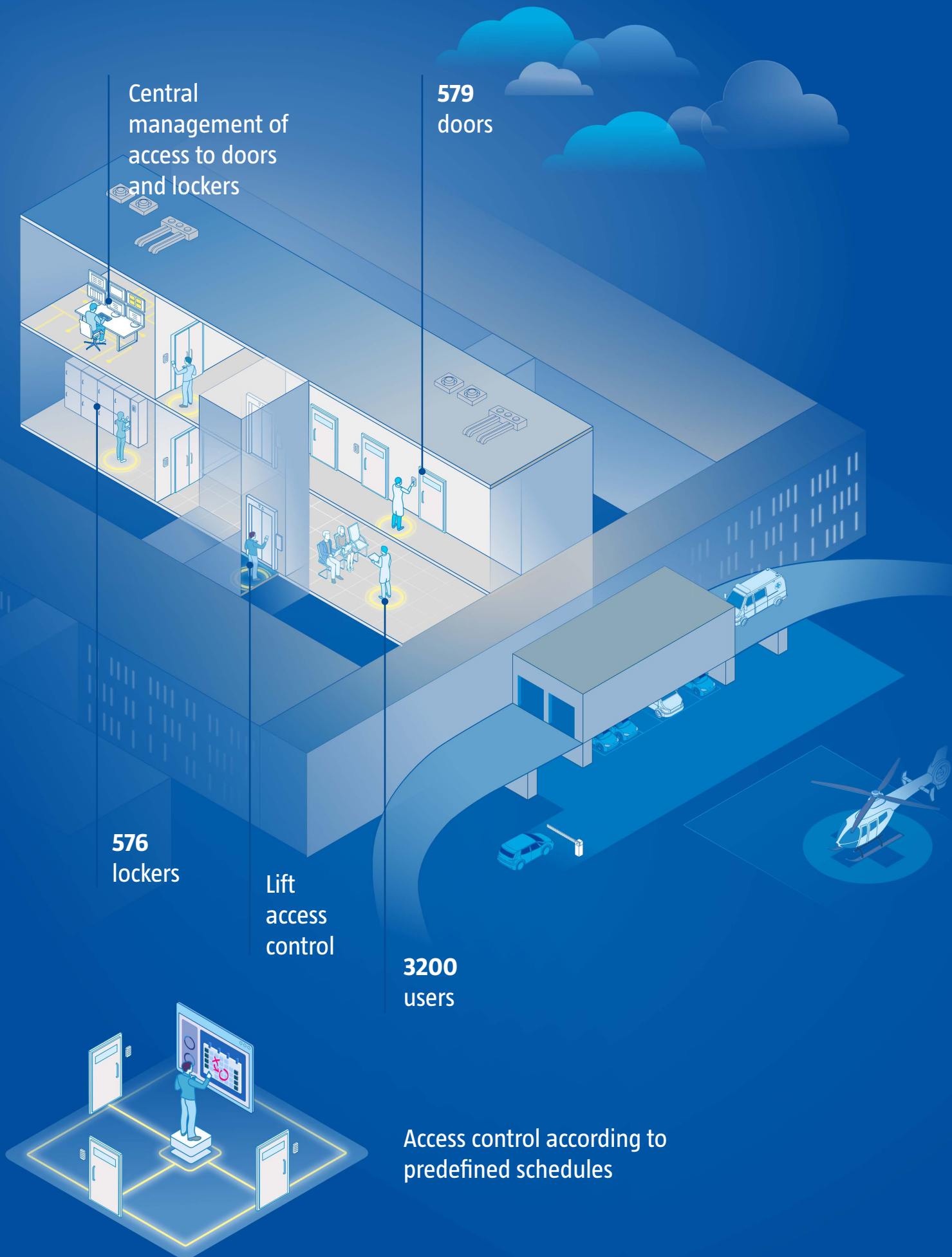
579
doors

576
lockers

Lift
access
control

3200
users

Access control according to
predefined schedules



Benefits

Eliminating the previously used standalone access control methods based on traditional keys and PIN codes and centralising the management of the access control system allowed for its considerable automation, which significantly facilitated its operation and reduced administration costs. The system operating at the Gorzów hospital is successfully managed locally by the IT department.

The implementation of access control to doors and lockers based on a single database both increased the level of security and convenience of use by eliminating keys and controlling who had access and when.

Easy and flexible user and schedule management including adding, deleting, and modifying access rights or time rules without disrupting the system's operation, as well as handling external employees/companies – outsourcing enables efficient administration, even though it is used by several thousand

people a day. As a result, the hospital has gained full control both on an ongoing and historical basis of the movement of people and access to rooms and staff lockers at every location where implementation of the RACS 5 access control system has been carried out.

The adopted solution using proximity cards together with the application of advanced access control functions (e.g., interlocking, lifts access control) also made it possible to increase hygiene levels by reducing contact with potential sources of infection.

The scalability of the solution in terms of the number of doors and users and its flexibility allow ongoing expansion with uninterrupted system operation. This does not disrupt the hospital's operations and also allows the implementation of new functionalities e.g., integration with VSS, LPR.



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