

Kaunas University of Technology (KTU). Library and Student dormitory access control

- Established in 1922, Kaunas University of Technology (KTU) is constantly ranked in the top-3 of universities in Lithuania, and the birthplace of many technological inventions and innovations of applied sciences. The library of Kaunas University of Technology is among the largest libraries in Lithuania. Renovated between 2020 and 2022, the library has become a modern space for studies, coworking, relaxing and social events, welcoming both students and the general public of Kaunas city.
- Library: 4-floor, 2'400 Sq. m of space – 440 work places, including 115 individual and 153 coworking spaces, 70-person amphitheater.
- Dormitory: 12-floor, 4'800 sq. m. of space, featuring elevators, high-throughput access gates with anti-passback and a private parking with EV charging points and planned LPR.
- Integration set: CredolD access control software, HID Global controllers and readers, Ülgen Optima high-speed gates, Digifort VMS with event tagging from CredolD.
- Integrator company: FIMA (Lithuania).



The Challenge

The key challenge for a university, hosting around 8'000 students every year, is ensuring their safety, security and convenience. It starts with arranging the premises to meet the modern living standards, and continues throughout everyday processes, which must be easy to follow, manage and observe. At the heart of every modern building therefore lies an access control system, managing people flows and providing vital information for automation, HVAC, security and other building management systems.

When choosing the technologies for buildings undergoing modernization, Kaunas University of Technology had the following requirements:

- Requirement for reliable, flexible, yet open system, which should allow the future expansion and crosscompatibility with other systems;
- Ensure quick user enrollment and ID compatibility with multiple ID card standards – ISIC, Kaunas city card, public transport card – as well as Mobile access.
- Provide open integration APIs, so that the platform can be connected to building, video and parking management systems in the future;
- Support for distributed and convenient user administration – allowing multiple system operators with varying levels of permissions, automated user activation and expiration, scheduled access and user importing from other platforms.
- Integration of secure yet elegant gate solution for dormitory access with anti-passback and event linking with VMS stream for violation monitoring.



The Solution

When starting the project, the university faced a typical complex decision to make – whether to start consolidating the management of diverse parts of the campus, or to go with “per-building” approach. The necessity to manage access for a huge number of users daily, including over 1’000 foreign exchange students and teachers, was still the key task.

Lithuania’s largest low voltage integration specialist, technology solutions company Fima advised KTU to test CredolD conformance to project objectives.

Learning that CredolD supported Active Directory user import, as well as multiple sites (Locations), which allowed deploying the project in multiple independent stages and managing access to separate buildings by different administrators, while keeping integral data in a single database, made the platform choice easy for KTU.

After the renovation, library and dormitory rely on the following access and security technologies:

- CredolD access control software with Active Directory user Import integration;
- Location feature (logical DB segmenting) for assigning limited-scope administrators to separate buildings;
- HID Global Aero X1100 controllers and X100 door modules;
- HID Global Signo 20, R40se and R10se readers with Mobile ID support;
- Ülgen Optima high speed gateway system with glass doorways, anti-passback and tailgating monitoring.
- Digifort VMS and LPR, integrated with CredolD for event tagging and parking access management.



The Result

“The system has far surpassed our expectations. It is simple and easy to use, has all the necessary features and requires minimal training for our staff, such as library managers. We can quickly accommodate local and foreign students, use a variety of credentials, and keep track of their access rights through our Active directory system without the headache of changes every semester. It is also important that we could ensure responsible use of the renovated facilities using detailed reporting capabilities of CredolD. We plan to keep adding buildings and expanding the functionality of the platform.” – says Mr. Grazvydas Visockas, the head of Infrastructure development department of Kaunas University of Technology.

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