

Axis network cameras help University improve security.

Integrated surveillance with security, fire and licence plate recognition systems increase efficiency at Czech University of Agriculture.



Organization:

Czech University of Agriculture, Prague

Location:

Prague, Czech Republic

Industry segment:

Education

Application:

Safety and security, license plate recognition

Axis partner:

Integoo s.r.o., Genetec, Integra

Mission

Extensive investments in new constructions, growing numbers of students and new security criteria forced the Czech University of Agriculture to re-evaluate its requirements for security and current camera surveillance. Besides the installation of suitable cameras on new buildings and the replacement of end-of-life devices, the Department of Security at CUA also faced the challenge of unifying its formerly fragmented surveillance system.

Solution

The whole project conception was proposed by Integoo, s.r.o, which suggested implementing a surveillance system with the use of a central surveillance and security-management site to manage the system. It was a gradual process of the integration of the various analog surveillance systems under unifying the Omnicast software platform and installation of IP cameras. The final project phase upgraded whole IP-surveillance system to its higher version security center together with a proposal for the gradual replacement of older cameras and expansion to new vulnerable locations.

After several years of experience with cameras from other manufacturers, the university evaluated and compared image quality and used Axis network cameras for new installations and upgrading existing camera points.

Result

The result of this was gaining control over all vulnerable locations at the university, including a general overview within the large campus area. Axis cameras from across the whole product portfolio were installed in new installation sites and used to replace end-of-life cameras.

"You will find cameras from the simplest ones, such as AXIS 206, up to specialized solutions such as AXIS 221, AXIS 241S Video Encoder, AXIS M3025, AXIS P1427-LE, AXIS P3346, AXIS P5414E, or AXIS Q1614. The key criteria for selection was mainly image quality in high-contrast scenes during day or night, where we selected the Lightfinder technology in Axis cameras," explains Libor Šup, head of the Department of Security at the Czech University of Agriculture.

“We highly appreciated the capabilities of Axis cameras while working under tough lighting and climatic conditions.”

Libor Šup, head of the Department of Security at the Czech University of Agriculture in Prague.

From fragmented solutions with unreliable outputs to a central surveillance system with sharp night vision

Surveillance over such an extensive area and operation at the Czech University of Agriculture in Prague would not be feasible without using surveillance cameras (first analog, later IP) practically from the beginning. In the past, each building had its own surveillance system, a different administrator, and solutions of diverse quality from a heterogeneous group of manufacturers involved.

At that time, neither the unified administration of all cameras nor centralized evaluation of certain incidents had been possible. There were no unified central records of the installed camera points and the operator could only have dreamt of unified surveillance, service administration and particularly unified evaluation of incidents. These were the reasons why the university decided to establish security department, which was separated from the IT department and then accordingly resolve the surveillance system comprehensively with the use of a central system and security-management site that would be responsible for the whole system.

Selection of cameras

The fragmentation of the systems did eventually also turn out to be an advantage. Thanks to experience with cameras from different manufacturers, the university could objectively evaluate and compare image quality and other features of the cameras. Upon deciding which cameras to finally choose for the new installations and to replace end-of-life solutions, the choice fell on the Axis solution, both due to its high image quality at night, where Lightfinder technology is being used, and at the same time working with high-contrast scenes.

“The primary benefit was also the higher resolution of the new cameras (ranging from 1 to 5 MPix depending on the requirements for each particular camera point) and the transition to PoE (Power over Ethernet), which led to savings in the installation of all the newly mounted cameras,” says Zdeněk Štěpánek, Sales Director of Integoo.

Another aspect was the possibility to use several different streams from a single camera within the unified video management software, which is now Security Center from the Canadian company Genetec. Of the over 120 camera points on the premises of CUA, Axis cameras make up about a half and their further expansion is planned.

Benefits of integration

Currently, all camera points at the university are managed centrally and surveillance over them is carried out from the security control room. Because of this, it was possible to gain a maximum effect thanks to integration.

The key element here is the central integration platform, Integra, which enables the interconnection of the surveillance system with the security and fire protection systems in CUA buildings. Furthermore, the remote control of gates was linked with the surveillance system and entryway intercoms. Because of this, the control room operators can work much faster and more efficiently.

The whole campus is equipped with license plate recognition system CARTAG which is also connected with IP-camera surveillance system to ensure overview of each car granted rights for entry and parking inside university territory. CARTAG was also integrated with university IT system, which makes the work faster and easier for university employees.

