Genetec™

University of Calgary

Taking campus security to the next level with unification

Industry
Higher Education

Location
Calgary, Alberta, Canada

Products
Security Center, Synergis, Omnicast, Sipelia, AutoVu Free-Flow, Plan Manager, Mission Control, Intrusion Management

Partners
Delco Security, Axis Communications, Bosch, BriefCam

UNIVERSITY OF CALGARY

The University of Calgary standardizes on Security Center to complete major security upgrade across all campuses

The University of Calgary (UCalgary) is a top comprehensive research university located in Calgary, Alberta, Canada. With origins dating back to the early 1900s, UCalgary became autonomous in 1966. Over 50 years later, the university has more than 33,000 enrolled students and 5,000 staff across its five campuses, field stations, and other facilities. The main campus is home to 11 of the university's 14 faculties and spans more than 200 hectares near the impressive Rocky Mountains. Other campuses include Foothills campus, Downtown campus, Spy Hill campus, and a remote campus offering nursing programs in Doha, Qatar.

Navigating the inefficiencies of older security technology

Ensuring community safety has always been a top priority at UCalgary. The security team works around the clock to secure its many campuses and keep everyone safe. This often includes using video, access control, and other security solutions to mitigate threats and promote a stronger sense of safety across its locations.

As years passed, the team began feeling the brunt of aging security technology. Each video and access control system was independently managed and owned by various departments. Going to different sites to retrieve video evidence from digital

video recorders (DVRs) or requesting the information from faculty contacts created roadblocks during investigations. And since some DVRs were also not securely locked away, the university had concerns about data security and privacy.

Maintaining the outdated security technology was becoming time-consuming and costly. While the UCalgary team did their best to work around these inefficiencies and keep systems functional, they reached a point where they knew it was time for a major security upgrade.

UCalgary began their journey to update their technology with the help of their trusted security integrator, Delco Security. The goal was to standardize on a video and access control solution across all university sites. They also sought to centrally manage all systems from one location and strengthen their cybersecurity and privacy posture. Having the freedom to upgrade other security systems later on, expand at their own pace, and select the devices that best fit their environment was also hugely important to the team.

With guidance from Delco Security, the UCalgary security team found what the right solution in the Genetec™ Security Center unified platform. According to Brian Whitelaw, Chief of Campus Security at the University of Calgary, Security Center also supported a holistic approach towards physical security and cybersecurity convergence.

"Our goal was to have a standardized model for security convergence across our university. Genetec Security Center was the optimal solution that allowed us to bring all our security systems together under one umbrella. The unified platform also gave us access to built-in tools and analytics that would help us address cybersecurity and privacy, as well as enhance our overall situational awareness."

Standardizing on Genetec Security Center across all campuses

Today, the UCalgary team works from a security operations center (SOC) on the main campus, using Security Center to manage access control, video surveillance, automatic license plate recognition, analytics, intercom, and intrusion detection across all sites.

While they're still migrating old systems onto the new platform, they currently have over 2,000 doors, 2,300 cameras, 45 intercom stations, 40 intrusion detection sensors, and various BriefCam analytics within Security Center. They've also implemented AutoVu Free-Flow to offer convenient gateless parking for students and staff, initially at three parking lots, with more to be enabled.

"We've definitely seen a better use of our resources with Security Center. In the past, if someone was at a door and called us via intercom to say they couldn't get in, we'd have to send personnel. Now, our operators can visually identify and verify the person's credentials and remotely grant them access. When responding to an incident, we no longer need to rely entirely on witness observations. Our SOC operators can pull up video to see exactly what happened and share information with security personnel while they're still at the scene. Security Center allows us to manage situations on campus more effectively," said Rick Gysen, the Director of Campus Security at the University of Calgary.

The SOC operators use Plan Manager – the map-based interface – to quickly locate doors, cameras, intrusion points, and intercoms. This makes it easier to navigate the various campuses and buildings and eases the burden of having to memorize the locations of newly installed devices. They can also receive and respond to access control, intrusion, or other alarms directly from the map, speeding up incident response time.

"We've upgraded our security technology rather quickly, and we did have some concerns from an operational perspective whether our personnel would be able to adapt and feel comfortable using these new security solutions. Having a fully unified security platform like Security Center has made that easier. Now, rather than having to train personnel on many different systems, there's only one system to learn and use," said Gysen.

Migrating access control with intuitive tools and support at hand

Achieving better situational awareness and response efficiency didn't happen overnight for UCalgary. The team took a phased approach, which allowed them to upgrade one system at a time and keep expanding as budgets are renewed.

"Our main goal was to identify standards for our security installations and then grow and apply those standards across our campuses. The scalability and openness of the Genetec platform were hugely advantageous in that regard. We could choose technology from many different manufacturers and upgrade our systems at our own pace," said Gysen.

Taking a phased approach was also particularly helpful during the access control migration. Moving access control data from multiple disparate systems onto a new platform can be a daunting task. UCalgary began with a pilot project of 80 doors. Throughout the process the team was put at ease with the hands-on support they received from Delco Security and Genetec.

According to Satnam Dhanda, Campus Security Electronic Systems Specialist at the UCalgary, "We had some concerns about how we were going to manage access control data as we transitioned from old legacy systems to Security Center, but Genetec and our integrator were extremely supportive throughout the process. We had access to the import tool which helped ease that initial data transfer. This allowed us to upload batches of cardholder data into the new platform using CSV files. And now, we're working towards implementing the Security Center Active Directory integration which will streamline our processes moving forward."

Today, UCalgary has over 85 buildings completed and are just about halfway through the access control migration. The team also took advantage of the Synergis Cloud Link to keep costs down and further expedite the access control migration. This intelligent gateway appliance offers native support for non-proprietary access control hardware. This meant the university could keep existing access control wiring and readers and minimize hardware and labor costs.

Currently, UCalgary has over 45,000 cardholders which include students, faculty, administrative staff, and contractors. Using the Synergis system, the team can now provision access control rights, manage all cardholder privileges, and customize door rules and schedules from one platform. They can also quickly deactivate cardholder credentials across all sites and pull detailed reports to support compliance mandates.

"Security Center Synergis™ allowed us to get very granular with customizing door rules and schedules, which helps our team be

more responsive to the needs of specific faculties and departments. During the pandemic, for example, our kinesiology department and medical school required some unique exception rules to restrict building access. Our School of Architecture and Design also has a downtown location that has to be open to students but closed to the general public. We were able to accommodate those business requirements using Security Center," said Whitelaw.
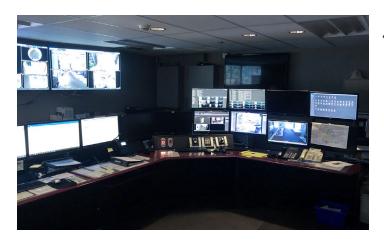
Boosting operational efficiencies with video analytics and intercom

Another key aspect of the security upgrade at UCalgary was adding video analytics and intercom. The team began by replacing old analog help phones with new SIP-based video intercom stations from Axis Communications. These devices enhanced video coverage around the main entrance buildings and offered easy two-way communication with SOC operators, at the press of a button.

"Having these new video intercom devices unified within the Genetec platform has given us a much better understanding of our environment. When we had the old help phones, we always relied on a person's ability to accurately describe where they were and what was going on. With the video intercoms, we can see exactly where they are, pull up nearby cameras, and see what's happening, all while keeping the dialogue with them going," said Gysen.

Investigations have also gotten a boost since deploying BriefCam analytics within Security Center. Various analytics such as object removed or left behind, direction, dwell time, and crossline detection can all be used to speed up searches when an incident occurs on campus.

"We use the BriefCam analytics much more for investigation purposes. Whether it's theft or another event, there are cases where something might happen after hours on a Friday, and it's only reported on Monday morning. Rather than having to search through three days worth of footage, we can use the analytics to find what we're looking for much faster," said Dhanda.

"We're also able to narrow down our searches using criteria such as gender, adult versus child, and predominant colors of an item, so there's a lot of flexibility. This can be particularly valuable if ever we run into a case where someone has gone missing or for other more urgent investigations," added Whitelaw.

Streamlining parking enforcement with AutoVu Free-Flow

Using Security Center, UCalgary has also streamlined parking at the main campus. In the past, parking attendants would sit at a lot entrance, collect payment, and issue physical parking permits to drivers. The parking team at UCalgary has since done away with all that using AutoVu Free-Flow, a module of the Security Center AutoVu™ automatic license plate recognition (ALPR) system.

"We have installed AutoVu ALPR cameras at the entrance of three lots. Students or guests can now drive into the lot and pay for their time at a pay-by-plate kiosk. If the driver goes over the allotted time, our parking team will receive an alert within Security Center indicating the vehicle is in violation. Again, this is another situation where we're able to maximize our team's efficiency using the Genetec platform," said Dhanda.

Since the ALPR system is a core component of Security Center, the security team can also access the ALPR data during investigations. In the future, they're considering adding more ALPR cameras on campus roadways to better track vehicles of interest and further enhance security.

Investing in a unified security platform that evolves

UCalgary has many other plans for continued expansion on the horizon. First, the team wants to finish upgrading and standardizing all their access control, video surveillance, intrusion, and intercom systems within the Genetec platform.

The security team is also in the process of setting up Genetec Mission Control™, the collaborative decision management system. When an incident occurs, this system will automatically guide operators through response protocols, so they can confidently handle any situation.

"We had seen another university using a Physical Security Information Management (PSIM) system, but the cost to implement that solution was well beyond our budget. Mission Control is built into the Security Center platform and gives us the same efficiency-boosting functionality at a fraction of the cost. Using Mission Control, we can reduce the sensory overload for our operators and help them focus on the most urgent situations," explained Whitelaw.

Other security solutions that have piqued the team's interest include the Genetec Clearance™ digital evidence management system, thermal cameras, and people counting analytics. For now, the UCalgary team is happy to have taken the technological leap forward with Genetec.

"Right now, we think this is a very exciting time to be standardizing on Genetec Security Center. Technology is evolving at such a fast pace and we now have the foundation to be able to accommodate new innovation. We also have so much flexibility in how we can adapt and expand our security platform. We're free to keep evolving our security initiatives to better protect our campus community. A testament to our success is hearing from students themselves about how the security technology enhances their feeling of safety on campus," concluded Gysen.

"Genetec Security Center was the optimal solution that allowed us to bring all our security systems together under one umbrella. The unified platform also gave us access to built-in tools and analytics that would help us address cybersecurity and privacy, as well as enhance our overall situational awareness"

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