Genetec™

Collaborative video surveillance: a key partnership between the community and the authorities to fight crime

Industry
Public safety

Location
Puebla, México

Products
Security Center, Omnicast, Autovu, Federation-as-a-service, Stratocast

Partners
MIZO Consultants

"You convince the community to participate when you show results, when they see that we are working, that we are fulfilling our responsibility, and when we show our willingness to serve them. We have shown that the program brings strategy and this led the community to participate. That is why there are more residential areas asking us to install Ventanas Ciudadanas® in their neighborhood," said Commissioner Manuel Alonso García, Public Safety and County Transit Manager for Puebla County, Mexico.

Puebla, known as the Free and Sovereign State of Puebla, is the fourth largest city in Mexico. Puebla's metropolitan area has a growing population of a little over three million, according to the National Institute of Statistics and Geography. This growth has also brought different challenges for Puebla. Therefore, one of the main objectives that the County has set for Puebla, headed by Mayor Luis Banck Serrato, was to guarantee peace and security in the city.

Faced with the challenge of offering better public safety to the citizens of Puebla, the Ventanas Ciudadanas® program was designed as a platform of collaborative video surveillance where citizens would participate as key players.
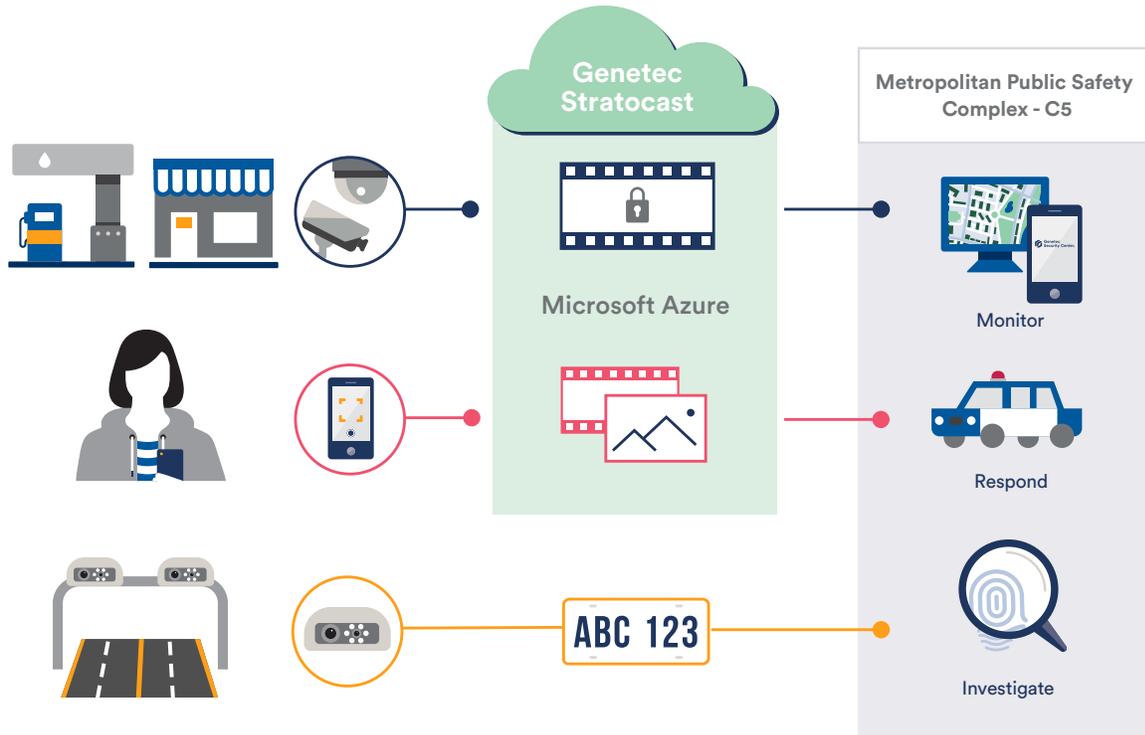
Today, security is a challenge in Mexico, and municipal, state, and federal governments are looking for solutions. In Puebla's case, for instance, 75% of the community feels threatened by crime.

Ventanas Ciudadanas® integrates public and private video surveillance systems for authorities and citizens to collaborate, and where the citizens team up to monitor within a social framework.

This model unifies private video surveillance systems with an intelligent alert system and the backup of video information in the Microsoft Azure™ cloud platform. Ventanas Ciudadanas® unifies four technologies in Genetec™ Security Center.

Commissioner Manuel Alonso García, Public Safety and Municipality Transit Manager for Puebla City, stated that they began by making a diagnostic of crime policies and then implemented a strategy called "Security for Everyone."

The authorities established different lines of action which took into consideration, limited operational staff. One step of the plan was to install user-friendly technology for both citizens and authorities, in hopes that this would help expand community participation.

Genetec Stratocast

Microsoft Azure

Metropolitan Public Safety Complex - C5

Monitor

Respond

ABC 123

Investigate

How it works

Moisés Mier-Villaverde, CEO of MIZCO Consultants, the company that developed Ventanas Ciudadanas®, said that the challenge is working with technologies that collaborate with one another. "Usually, a software developer chooses between two options: a closed or an open architecture. The Security Center open architecture allows you to unify different technologies into an already designed platform, and that is what we like to do."

When you eliminate the problem of having to unify different technologies, then the client automatically can start to make decisions instead of wasting their time changing from one desk to another to understand what is going on during an emergency.

In short:

- The Community Alert is installed in 5.5-meter-high poles
- Video from the Microsoft Azure™ cloud is sent to the Emergency Center
- This video is also sent automatically to mobile devices with integrated alert systems on board to the police, Emergency Centers, and the community
- Security Center is the unified heart of the solution

For Commissioner Alonso García, the Ventanas Ciudadanas® video surveillance program's objective is that "[...]the community has access to the same cameras that are installed in their neighborhoods, that they themselves monitor these cameras, and get involved in security by participating directly with authorities. This is a high priority element for the community."

When there is an emergency whether it be a gunshot, assault, or an abandoned baby, it is of utmost importance to react immediately. Ventanas Ciudadanas® unifies all of it in just one flow of information.
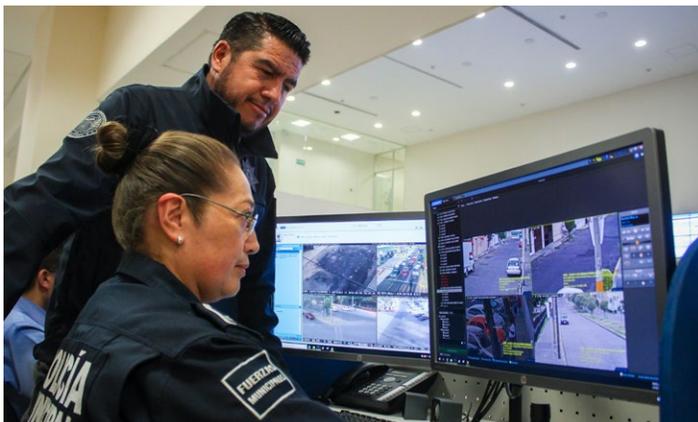
"On the one hand, you have alerts in a home, and on the other hand, you have an app in an Apple iOS or Android mobile, a button in a pole where the cameras are located, and Genetec Stratocast™, the video surveillance solution in the cloud. All of them work at the same time, including the software and the alarms. Today, you can activate an alarm through an app in the Apple iOS or Android mobile, in a wireless button, the fixed silent button in a store, or you can activate an alarm in the button that's located in a pole," said Mier-Villaverde.

The people in the community that have the Ventanas Ciudadanas® program have the application in their Apple iOS or Android mobile. If a pedestrian is walking down the street and has an emergency, he can also press the button in a nearby pole.

What usually happened was that at the very moment that an alarm was activated, that alarm was displayed on a monitor. The operator monitoring at the control center would have to change from one desk to another and search for the nearest camera to the incident.

There is an app for Apple iOS or Android smartphones that can activate alarms. With this solution, the alarm is activated in a computer where you can see which agent is the nearest to the incident.

All the devices are linked to a specific window. When they are activated, a window opens with the live video in the emergency center, and instead of activating the alarm into another neighborhood alert system, it activates in Security Center.

You can see the location of the video camera at the same time it is activated, regardless of if it is from Apple iOS or Android smartphone, physical button, or a wireless button. Also irrespective of the origin of the alarm, the notification will be sent to the nearest agent where the incident is developing. This is precisely what the Security Center Mobile is used for.

Three parties monitor the event: the citizen, the police, and the agent from the Emergency and Immediate Response Agency (CERI, for its Spanish acronym). The citizens and the police assigned to that window are the ones who verify the incidents routinely and permanently; one does it through the Security Center Mobile platform and the other through Stratocast.

The importance of the model stems from including citizens as participants in the video surveillance process by supplying the entity with technological tools that will alert the community at the same time as the authorities to respond to an emergency.

Faced with Puebla City's challenge, MIZCO Consultants presented this proposal, which up to now is unique in the world, where society and government coexist in the same technological environment. The proposed products were Security Center, Security Center Omnicast™, Security Center Mobile, Federation

as a Service (FaaS), Stratocast, Plan Manager, in addition to BCD SAS and Mobile Server.

Security Center is the core platform that unifies all the solutions. The designed solution reduces the cost by 400% compared to traditional video surveillance projects. It also offers 200% more system that an entity would receive given the same budget. It, therefore, reduces the burden on the government budget and triples the number of people who benefit from the solution.

Collaboration

Today, we need all members of society to get together and create public policies, so criminals know that we are organized and that there are many more people with watchful eyes.

Commissioner Alonso García stated that the "Everyone for Security" strategy began to take actions to empower the State. This included hiring more people to join the ranks of the municipal police force, acquiring more equipment like patrol vehicles, providing better employee benefits, and working with the community in order to prevent crime.

This technological plan came into fruition as the program "Citizens Security Committee," also known as 4 x 4, where the committee organized a prevention program and selected 16 security actions to put in place: 4 immediate actions, 4 short-term actions, 4 medium-term actions, and 4 long-term actions.

Up to now, actions applied with technology involving video surveillance cameras have had two outcomes: it has prevented crime and it has provided help and support to citizens during incidents.

The members of the Citizens Security Committee proposed specific actions like placing cameras in certain locations. The proposals were then submitted to the Chief of Police and to the Crime Prevention staff to decide the best options together. Commissioner Alonso García said that they would go to proposed locations and decide where it was more convenient to place a Ventanas Ciudadanas® camera.

The initial project included 1000 cameras. The next phase included 500 more cameras and the third phase will include 300 additional cameras to be deployed by July 2018, totaling 1800 Ventanas Ciudadanas® cameras in Puebla City.

At the beginning of the project, 25 neighborhoods were diagnosed as a priority by the Criminal Police, primarily those located in high crime areas.

The Citizens Security Committee decided it was a priority to install the Ventanas Ciudadanas® program and today, almost all 25 neighborhoods have achieved a 40% decline in crime.

"The deployment of the cameras was complemented by other program strategies, for example, by assigning patrol cars to neighborhoods and follow through with the 16 actions the committee decided on. In addition, other neighborhood

committees called Neighborhood Alerts were created, that work in tandem with the Citizens Security Committee. The most recent "Crime Incidence Analysis" also reported a 40% decline in crime." stated Commissioner Alonso García.

Additionally, the citizens perceived enhanced security in the areas where cloud-based video surveillance systems were installed. "When a citizen sees that someone is committing a crime, he reports it through his cell phone, the wireless button, or the physical button under the Ventanas Ciudadanas® system to ask for help. Citizens also found the response time to be shorter. It's now between 2 and 3 minutes," said Commissioner Alonso García..

The public official also indicated that "...since the police officer responsible for that neighborhood has his mobile device, he can view the video from the Ventanas Ciudadanas® system. He also receives the emergency alert and the georeferenced location which has significantly enhanced the response time.

Commissioner Alonso García also indicated that traditional video surveillance systems that need connectivity through cables or microwave are more expensive solutions than the ones in the cloud. There are also places where it is more complicated to install a wired video surveillance camera.

"It would be very expensive to install cameras in certain places. But the Ventanas Ciudadanas® program cameras provide the advantage of installing cameras in complex places, for example, in very high crime areas, which is precisely where they are needed the most," affirmed the official.

By reducing response times to an incident by 40 minutes and by being able to respond in as little as 3 to 5 minutes, government expenses are reduced as well. MIZCO states that they design public policies "...because instead of buying more patrol cars and spending more money on gas, the police can go straight to where the event is taking place and where they are needed the most, and ultimately, the police become embedded in the community," concluded Mr. Mier-Villaverde.

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