IN THE CLOUD: AN EASY PATH TO EFFICIENCY
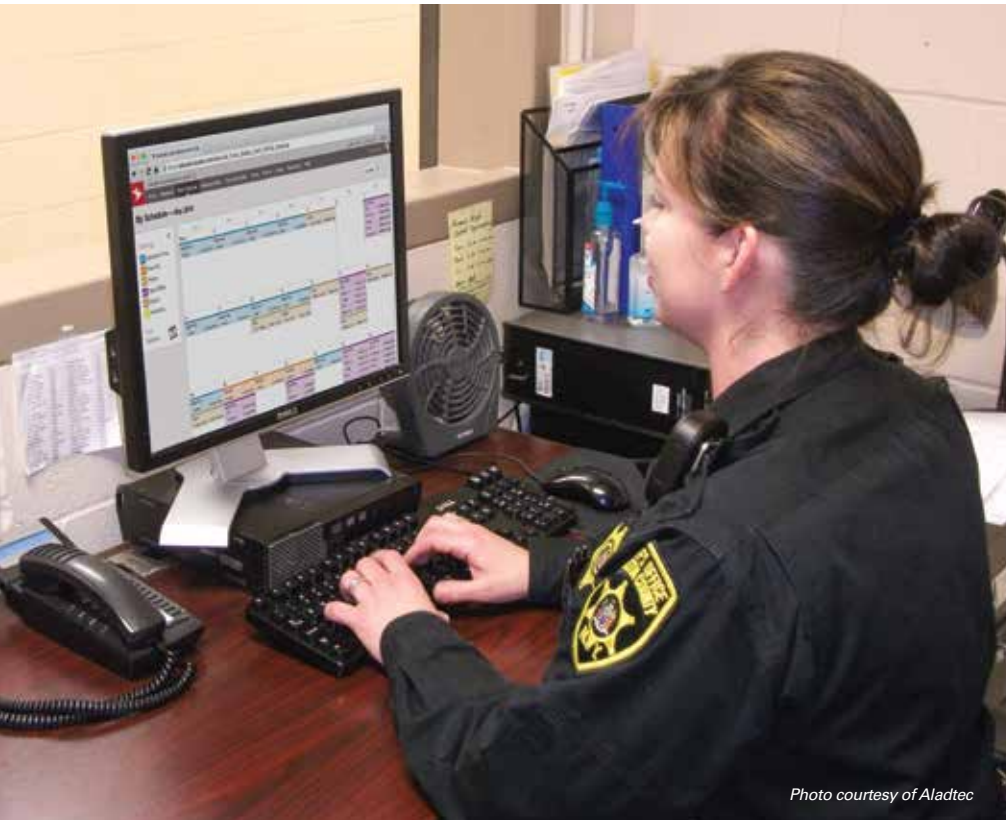
By Scott Harris, Freelance Writer

Photo courtesy of Aladtec

Cloud computing has opened up a host of new possibilities for many industries, and law enforcement is no exception.

The technology, which, in its current form, ascended to popularity in the mid-2000s, provides a service that is not unlike renting space in a storage facility. The cloud lets users store data in large server networks, thus allowing those users to keep information in an area outside their own networks. The large amount of storage the cloud provides brings better speed, convenience, efficiency, and flexibility to users who would be hard pressed to provide such capacities on their own.

For the law enforcement sector, the cloud can be used for everything from high-level strategy to everyday operations. In all cases, expenses over time can be higher than they are for non-cloud solutions (think renting versus buying), but cloud providers say that the investment is more than returned with improved and streamlined functions.

A Wider Lens

Cameras and other surveillance equipment are commonplace in many cities. Even so, it can be difficult for law enforcement to tap into the right resource, at the right place, and at the right time.

Converged Security Information Management (CSIM) is a cloud-oriented solution created by Vidsys, a software company based in Vienna, Virginia, and it empowers police to solve this challenge.

CSIM helps agencies collect, analyze, verify, resolve, and track information. Users also can determine ahead of time what data should be included or excluded in a given search, with searches occurring based on time, location, or frequency, among other factors.

"It takes data from a variety of sources—it could be a camera, it could be closed caption TV, it could be something else," said Roberto Mandanas, Vidsys' vice president of strategic marketing and alliances. "We integrate it, organize it, and make it actionable. It's true situation management."[1]

The software is programmed to identify potential situations and then present those data points to a command center operator. Authorized users can access CSIM from any Internet-connected device for maximum real-time situational awareness.

According to Mandanas, CSIM has potential applications across both law enforcement and public safety. "It could be a shot fired, or it could be a lost child," Mandanas said. "The screen comes up, and you can click to see all the assets around [a given location]. There would be a map of cameras around where a gunshot took place and then you can form an action plan. It gives you a dynamic, step-by-step plan to manage the incident."[2]

As another example, when a city sustains flooding, the flood sensors on a given location's levees can be connected to CSIM. In that case, the technology alerts relevant officials almost instantaneously. "Those sensors go off, and you can pull up the cameras in that area," Mandanas said. "You have a real-time crime center, and it is able to make an impact immediately."[3]

Another new cloud-based product brings a similarly comprehensive approach to investigations. BallisticSearch was introduced this fall by Vigilant Solutions, a company based in Livermore, California, with a long history of creating law enforcement–related software solutions.

The solution provides its customers with nationwide sharing of ballistics information, which Vigilant Solutions' leaders says can lead to more comparison and closing of crimes—with fewer backlogs. Individual agencies control how they capture and share ballistics images.

"It rapidly allows agencies to use small hardware to capture images of casings at the scene of a crime and compare those with other casings from other scenes," said Tom Joyce, vice president of business development at Vigilant Solutions. "If an agency in California has reason to believe a casing in Maine is connected, you can compare with the click of a button."[4]

The tool consists of a small piece of hardware containing a small camera and related equipment. According to Joyce, the cloud is what makes such a lean physical profile possible, not to mention the tool's actual capabilities. "Something like this not being cloud-based means [it would have] more hardware and [would be] more regional," Joyce said. "This device is smaller than a brick and connects to any laptop."[5]

Less Time, More Morale

Cloud-based solutions can help law enforcement agencies with their day-to-day tasks just as much as—if not more so than—the more complex aspects of police work.

For example, managing firearms can be a job in and of itself—not only managing the firearms themselves, but also the training, maintenance, and the other procedures that go along with them. That process is simplified by ArmorerLink, a cloud-based tool created by former law enforcement officers for Ganete Solutions, a software developer based in Hillsboro, Oregon.

"We're bringing together four or five different applications into one solution," said Joe Ganete, the company's president. "When law enforcement agencies issue a firearm, they assume several responsibilities. They have to track the firearm, maintain it, and provide the correct training."[6]

Perhaps the prime example when it comes to day-to-day efficiency improvement lies in the process of personnel scheduling. Static computer programs and pen-and-paper systems still remain in plenty of stations, but vendors say cloud-based systems can provide speed, efficiency, and transparency without layers of extra difficulty. And it is just as easy to learn, if not more so, than traditional systems.

"Communication is extremely important, and with this that communication is instant," said Jon Forknell, vice president and general manager of Atlas Business Solutions, Inc., a software developer based in Fargo, North Dakota, which created ScheduleAnywhere. "Someone can't show up for work, or someone wants to change shifts, it's all instantaneous."[7]

Replacing the old Visual Staff Scheduler Pro, which is still available but exists as a standalone program that works only on the individual computers on which it is installed, ScheduleAnywhere is subscription based. That can mean some added cost, but according to Forknell, the time it can free

up more than makes up for the cost—up to 75 percent less time is spent on scheduling, based on company estimates.

"You used to have a one-time cost, but you'd have a lot of limitations. You'd have to install it and manage it, and your data was landlocked on one computer," Forknell said. "The benefits far outweigh a slight increase in cost. Anytime, anywhere access for the person being scheduled. You get it in your car; you can interact with the manager."[8]

Cloud-based scheduling can also save organizations money when used deliberately for one important scheduling function: overtime. "You can modify the schedule in real time to manage overtime hours. It eliminates the hassle," explained Forknell.[9]

That's not the only way that cloud-based scheduling can improve the overtime process. According to Dave Feyereisen, president and founder of Aladtec, the River Falls, Wisconsin, firm that offers a version of its signature scheduling software program for law enforcement, chiefs can ease the competition, confusion, and even confrontation of overtime scheduling with a more automated system.

"Morale issues come into things like overtime, was it handed out fairly? This keeps things transparent," Feyereisen said. "No more he said–she said. Everybody can see the system. It just keeps going. Everybody sees all the changes being made in real time. You really can't do that without the cloud."[10]

Whenever data are stored in the cloud, questions about security and privacy are inevitable. Breaches are never impossible, but they are made less likely by constant evolutions in security. Companies like Aladtec are committed to security above everything else, Feyereisen said—particularly when it comes to law enforcement.

"Keeping our customers' data secure and private is our utmost concern," he said. "We use everything from physical security and encryption, to automated testing and employee training to keep on top of it. It's the type of thing you have to obsess about constantly—and we do."[11]

Using cloud solutions allows external experts to handle security and technical issues, thereby freeing up end users to take advantage of the convenience and efficiency that those solutions can provide. When used correctly, cloud-based software not only saves time but helps law enforcement agencies operate more effectively in the areas that matter most, vendors said.

"The cloud eliminates the mundane and error-prone aspects of scheduling," Feyereisen said. "It improves morale. There are rules, and those rules have always been there, but you can take those rules and put them into the system. And then it works better."[12] ❖

Notes:

[1]Roberto Mandanas (vice president, marketing and strategic alliances, Vidsys), telephone interview, September 14, 2017.
[2]Ibid.
[3]Ibid.
[4]Tom Joyce (vice president, business development, Vigilant Solutions), telephone interview, September 12, 2017.
[5]Ibid.
[6]Joe Ganete (president, Ganete Solutions), telephone interview, September 12, 2017.
[7]Jon Forknell (vice president and general manager, Atlas Business Solutions, Inc.), telephone interview, September 14, 2017.
[8]Ibid.
[9]Ibid.
[10]Dave Feyereisen (president and founder, Aladtec), telephone interview, September 14, 2017.
[11]Ibid.
[12]Ibid.

PRODUCT FEATURE:

CLOUD COMPUTING PROVIDERS

For contact information, please visit www.policechiefmagazine.org.

Aladtec

Amazon Web Services

ArmorerLink (Ganete Solutions)

AutoReturn

Axon

Kaseware

LexisNexis Risk Solutions

Microsoft

MSAB Inc.

NICE

Panasonic

PredPol

ScheduleAnywhere

Spillman Technologies

Tyler Technologies

Vidsys

VIEVU

Vigilant Solutions

WatchGuard Video