CITY OF AUSTIN RAISES ITS SMART CITY SECURITY IQ

By: Diane Ritchey

Cities all across America are jumping on the "Smart City" bandwagon. There are several different aspects of what a smart city looks like, but overall, cities are looking to use technology to make their city safer. Technology can have a significant capital expense, so reusing as much of the existing infrastructure as possible is paramount for cities struggling with diminishing budgets. The biggest challenge with doing this is that most systems have been acquired by different departments at different times and installed by different contractors using different manufacturers. More often than not, these disparate systems can't communicate with each other.

Consolidating these old systems is paramount for interoperability in emergencies. And training on fewer platforms increases response time and provides better situational awareness. So, the big question is: how do you do this in a cost-effective phased approach? There are software companies that can connect old systems together, but they charge almost as much as ripping and replacing the entire system. And the age of most of these systems would require them to be replaced at some point anyway.

The city of Austin, Texas recently categorized their older systems into three buckets — must replace, need to replace and nice to replace. Working with Salient Systems, city officials then looked at the age of the current technology in the categories compared against the expected End of Life support for the products. With close to 300 facilities to evaluate, officials knew the process would be very arduous and time-consuming. To streamline the evaluation, they focused on the four basic security disciplines: video, access control, intrusion, and fire detection. The latter two were in good shape as far as 1. Being on just a few platforms, 2. The product's technology has not really evolved, 3. The products, for the most part, were still being supported by the manufacturers.

The access control and video products were next. Even though an evaluation uncovered that the city had several different access control platforms, the majority of the facilities were under one manufacturer. This evolved from the city's need to have one access control card to work across several different facilities. The hardware on these platforms had not changed, so the manufacturers still supported them. The software also needed some updating to standardize on one version, but overall, the features offered in the newer versions did not provide any significant capability changes.

"*Ultimately, the Salient solution gave a town known for its many tech-savvy corporations a leg up on achieving "Smart City" status.*"

Last was the evaluation of the city's video surveillance systems. Austin, as with many other cities, used more than 10 different platforms for recording security video. Most of them were isolated analog or very old IP systems. In many cases, the hardware was out of warranty and was not supported by the manufacturer, and the hard drives recording the video were failing due to age. Additionally, the Operating Systems in use were no longer supported by Microsoft, which presented cybersecurity vulnerabilities if city officials ever wanted to place the video surveillance systems on the city's network. With all of these issues, it was quickly apparent that the ability to see all of the video remotely in one platform could not happen without an overall standardization of the video system.

A new video surveillance system needed to have five components.

1. **Open architecture,** the ability to talk to several different access control platforms, and several different camera manufacturers.
2. **Scalability,** the ability to start small and grow to a system managing thousands of cameras across hundreds of facilities.
3. **Bandwidth reduction capabilities.** Due to the significant distributed architecture of the existing systems, streaming video across the cities network needed to be done.
4. **Reusing existing infrastructure.** With many of the sites using analog cameras, a system that can support both analog and IP was needed to match budget constraints.
5. **Lowest cost of ownership.** The least expensive solution was not the goal, but minimizing the reoccurring cost of support was necessary.

Matching all five criteria to one product seemed like a daunting task. It appeared that several products contained some aspects, but none emerged as a clear winner, so officials thought that they might have to compromise. After looking at the capabilities that Salient offers, Christopher Adams, Security Manager, City of Austin, says, "In our effort to consolidate all city departments' video systems, it was important that we look at a VMS platform with a truly open architecture and great scalability. Integrations to the city's diverse number of access control systems, and varied makes and manufacturers of cameras was also of utmost importance. We wanted to consolidate but not rip and replace, so in the end, Salient Systems was the right choice for all of these metrics."

After the deployment, which began almost three years ago, it became apparent that the bandwidth reduction technology that Salient offers – Dynamic Resolution Scaling – outperformed the city's original expectations. This allowed officials to deploy higher and higher resolution cameras in even some of the city's most remote sites without the concern of latency/lagging live video or the need to provide expensive high bandwidth internet services. This included the deployment of temporary cellular connections sites as necessary for the numerous special events that the city holds each year.

Ultimately, the Salient solution gave a town known for its many tech-savvy corporations a leg up on achieving "Smart City" status.

SALIENT™
www.salientsys.com