White Paper

ASAP to PSAP Protocol Overview

The Automated Secure Alarm Protocol (ASAP) is a national program that is the next generation for the processing of information from alarm monitoring stations needing emergency dispatch. This protocol was founded through the joint partnership of APCO, CSAA and NLETS – receiving government recognition and funding since 2010.

Functions of the ASAP to PSAP Program

This whitepaper explains the following:

- What ASAP is
- How ASAP works
- What are the benefits
- Experiences shared by Central Stations
- How do I find out more

What ASAP is

The Automated Secure Alarm Protocol (ASAP) program is a computer-aided dispatch system designed by the Central Station Alarm Association (CSAA) and the Association of Public Safety Communications Officials (APCO Int'l).

How ASAP works

The protocol reduces the two- to three-minute relay currently in place by allowing a computer at the dispatch center to process data.

What are the benefits

Vector Security CEO Pam Petrow said recent natural disasters on the East Coast have provided a proof of concept for CSAA's ASAP-to-the-PSAP program." Petrow told *Security Systems News*. "In the earthquake [of August of 2011), we were the only alarm company able to reach the city of Richmond [Virginia], because all the phone lines were down or busy because everyone was using the phone lines. But we were able to still transmit data. Given the number of natural disasters we've been experiencing lately it's nice to have this technology to help." Bill Hobgood is Public Safety Team project manager for the city of Richmond, Virginia's IT department. He was personally affected by the natural disasters that pounded the Eastern Seaboard last week. He feels the ASAP-to-the-PSAP program did exactly what it was supposed to do.

> "The city of Richmond experienced two major events over the past week. The first was the 5.9 [magnitude] earthquake centered in Mineral, Va., only 47 miles from the city of Richmond. The second major event was Hurricane Irene which caused severe damage to Central and eastern Virginia," Hobgood told SSN. "During both events … the Automated Secure Alarm Protocol (ASAP) worked effectively and flawlessly for the city of Richmond and the alarm monitoring companies [Vector and Monitronics. UCC uses

ASAP to pass alarms to Houston but has no Richmond accounts] that use ASAP to pass alarm notifications to Richmond according the 9-1-1 supervisors that I spoke with as a group at noon today [Aug. 31]. Most alarm companies still call the city of Richmond on a seven-digit non-emergency line. For them, it was very long wait before staff in the 9-1-1 center were able to answer telephone calls from alarm companies." Hobgood said the automated protocol was on track to see significant growth moving forward.

"Alarm companies using ASAP were able to deliver their alarm notifications to the city of Richmond in five seconds. As inundated as the city was with trees down across streets and into house, traffic lights out from power outages, flooded roads, etc., at no time did the city ever stop responding to alarm calls. The ASAP to PSAP program has proven its worth," Hobgood said. "I have a list of roughly 100 9-1-1 PSAPs throughout the country that have expressed interest in the ASAP program. Many of these of these have made commitments to participate. Following the success of the Virginia pilot and the Houston implementation of ASAP, we expect the list to grow by leaps and bounds."

Automated Secure Alarm Protocol Reduces 9-1-1 Processing & Responses Times

ASAP to PSAP

Bill Hobgood *on August 02, 2011 in Calltaking/Dispatch, Operations*

The city of Houston's Emergency Center (HEC), the fourth largest 9-1-1 PSAP in the U.S., has become the latest public safety communications agency—and the first in Texas—to implement ASAP. HEC went live on April 28, 2011, with an interface solution named the Web Alarm Reporting Mechanism (WebARM), developed by Houston's CAD provider, Northrop Grumman. WebARM conforms to the approved standard, which is reinforced with the use of NIEM and XML standards. David Cutler, HEC director, envisions an estimated savings of $1 million to $2 million annually based on the proven success of the data exchange in Virginia and the Houston experience since April. Houston officials expect a reduction in both alarm company and PSAP call-handling expenditures, while greatly improving the accuracy and timeliness of alarm call transactions and the corresponding public safety responses.

Houston implemented WebARM with participation of Pittsburgh-based Vector Security and San Antonio-based United Central Control (UCC) alarm monitoring companies. Dallas-based Monitronics, another central station, became operational with the standard in July. Collectively, these three alarm companies monitor 43,000 alarm systems in Houston. Houston receives more than 2,000 "police-related" alarms weekly on average. Since the launch of WebARM, Houston has experienced a 10% drop in alarm

calls created by PSAP calltakers and a drop of 8-13% in Houston's seven-digit phone number call volumes.

"As the first metropolitan city in the nation to utilize ASAP, this will serve as another tool in our efforts to provide the best possible public safety services available for the citizens of Houston," said Cutler.

CSAA Becomes an NLETS SPO

On May 5, 2011, Nlets (www.nlets.org) approved the CSAA as a strategic partner organization. This announcement followed a two-year effort of analyzing the CSAA's business model and reworking that model into a design that will allow the eventual rollout of ASAP to many central stations and PSAPs.

The CSAA/APCO Technical Committee designed and proposed the installation of a CSAA-managed "message broker." The message broker, scheduled to be operational approximately the fourth quarter of CY 2011, will allow most alarm companies to participate in the ASAP program. The message broker is the "traffic cop" that will be handling incoming alarm notifications (Nlets MKE: ALQ) from the alarm companies, validating that each message meets minimum requirements, and sending the message to the Nlets message switch for forwarding to the correct PSAP via the appropriate state control point. PSAP responses (Nlets MKE: ALR) will be delivered to the message broker by Nlets and forwarded to the originating alarm company. For routing purposes, all transmissions use originating agency IDs (ORI). Each participating alarm company has been assigned an ORI by Nlets. The Virginia and Texas state control points have authorized the passing of ALQ/ALR traffic. Other state control point representatives have shown interest in participating.

The county of York, Va., and the city of Richmond, Va., conducted the first pilot with Vector Security as the pilot central station. Performance measures tied to goals were incorporated in the standard based on expectations during the pilot. Goals include: 1) a reduction in the phone call volumes between alarm monitoring companies and PSAPs, 2) reduction in miscommunications and mistakes made during the verbal handoff of alarm notification information between an alarm company operator and a 9-1-1 calltaker, and 3) a reduction in PSAP processing time, resulting in an equivalent

reduction in response times by first responders, resulting in the likelihood of increased law enforcement apprehensions made, fires being more quickly extinguished and more lives saved.

The Results in Virginia

The Virginia PSAPs have logged the receipt of more than 13,000 alarm notifications from Vector Security, including police, fire and emergency medical alarms. This represents 15,000+ fewer phone calls for these PSAPs (alarm call centers make multiple calls associated with a single alarm; one call to report the alarm, one or more calls to provide updates regarding the alarm, and one or more calls to determine how the alarm was cleared). Not one single mistake has occurred through the use of ASAP. Miscommunications between the alarm company operator and the PSAP calltaker no longer exist because a verbal conversation is no longer necessary. ASAP provides a messaging feature that operators can use for active events, further reducing phone call volumes. Because the alarm data is delivered to the CAD system or a front end processor in the PSAP, the CAD will validate the address and translate the data into a call-for-service that appears in the radio operator's dispatch queue along with other calls-for-service within seconds. The alarm company provides all available data associated with the alarm account and no piece of data is overlooked, unlike the traditional verbal question-and-answer calltaker session that often averages 1½–3 minutes. Some alarm companies have complained their telephone calls go answered for several minutes or they are put on hold sometimes 10 minutes or longer before the calltaker returns to the line to take the information. With the ASAP method, this scenario no longer occurs.

The city of Richmond has at least four documented cases in which the police arrived so quickly upon the receipt of a burglar alarm received via the ASAP method that a burglary suspect was captured. Richmond also sends a broadcast copy of high-priority alarms to all MDCs in the police vehicles so that officers can head in the direction of the alarm location before the call is voice dispatched.

The bottom line: Public safety communications agencies should consider the impact that a 2–3 minute or more reduction in processing and response times would mean to them. For most, it's a no-brainer, and the proven benefits are many. As more CAD providers develop their solution to take advantage of ASAP, PSAPs should put the use of this standard on their radar screens for the future. For more information, write to

911services@apcointl.org or visit
www.apcointl.com/new/commcenter911/APCOstandards.php.

About the Author

Bill Hobgood is a project manager for the city of Richmond's DIT Public Safety Team with 39 years of experience in public safety. He is also a project coordinator for APCO International's Comm Center & 9-1-1 Services Department and a subject matter expert on the ASAP Project.

Monitronics Security, Dallas, Texas

Central Station Real Deal – 12/06/2011

On Tuesday 12/01/11 around 1:30am, 3rd shift Emergency Dispatch Operator Delia Rico received a counter motion burglary alarm from the "Handy 46 Subway" shop in Houston, Texas.

Delia quickly called the sandwich shop but when no one answered she was calling the manager in no time. Just as the phone number was ringing, she also received a cooler motion burglary alarm. When Delia told the manager what was happening at his business he said "Dispatch the police!"

Without hesitation Delia dispatched and the Houston PD and they were rolling in a flash. Due to their fast action the Houston PD were calling us back in less than six minutes to advised us they had arrested three suspects

Great Job Delia! This arrest has pleased our customer and saved his property. It's also more supporting proof that CAD dispatch and the ASAP program works great!
- Susan Murphy

Experiences & Testimonials

"ASAP is extremely important to public safety and welfare because it will save time in public safety communication centers, speed the response to critical events, and greatly reduce the likelihood of error caused by human interface."

- ***Ed Bonifas**, CSAA co-chair of the ASAP Steering Committee*

"CSAA and APCO members' leadership and support in building this program is essential, and future generations in our industry will recognize their contribution as a pivotal point in our industrial evolution."

- ***Pam Petrow**, CSAA co-chair of the ASAP Steering Committee*

"ASAP is a public-private partnership designed to eliminate telephone calls from alarm companies, eliminate miscommunications by alarm company operators and 9-1-1 PSAP call-takers, and reduce 9-1-1 processing time by two to three minutes or more. The

reduction in 9-1-1 processing time has the potential for an equivalent reduction in response times by public safety first responders, resulting in a likelihood of increased law enforcement apprehensions made, fires more quickly extinguished and lives saved. The outcome for Houston and the rest of the nation is huge."

- ***Bill Hobgood**, project coordinator for APCO and project manager for the city of Richmond's Department of Information Technology Public Safety Team*

The ASAP program replaces the telephone calls between the alarm company and the 911 public safety answering point [PSAP] call-takers. So, I'm going to get immediate communication from the PSAP and eliminate any hold times my operators may have when it comes to making a dispatch. The program not only reduces the phone calls, but it reduces any mistakes that one of my operators may make."

- ***Mary Jensby**, Past CSAA Chairperson of the Outreach Committee, and Director of Central Station - Monitronics Security , Dallas Texas*

The ASAP program has reduced the number of calls to Houston according to President, Teresa Gonzales of United Central Control and the reduction in their receive time has been very effective. Teresa also state that 50% of their voice calls to Houston has been eliminated and her "Operators Love the Program". The ASAP program has also been credited for the elimination of Miscommunication between the Police, 911 Operators and the Dispatch Operators.

- ***Teresa Gonzalez**, President United Central Control, Inc.*

How do I find out more?

Reference our key areas of contact:

- www.csaaintl.org/asap.htm
- Education Presentation
    - Script
- Readiness Survey
- Frequently Asked Questions
- Glossary Terms

About APCO International

APCO International is the world's largest organization of public safety communications professionals. It serves the needs of public safety communications practitioners worldwide — and the welfare of the general public as a whole — by providing complete expertise, professional development, technical assistance, advocacy and outreach.
For more information on APCO, visit www.apcointl.org or contact Lindsey Coburn.

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About CSAA International

The Central Station Alarm Association (CSAA) is an internationally recognized non-profit trade association. It represents central station monitoring companies that are certified by a CSAA-approved Nationally Recognized Testing Laboratory, such as FM Global, Intertek/ETL or UL, in the burglar and fire alarm, CCTV and access control industries. CSAA is legally entitled to represent its members before Congress and regulatory agencies on the local, state and federal levels, and other authorities having jurisdiction (AHJs) over the industry. Since its incorporation in 1950, CSAA has served its members' interests through education, online training, meetings and conventions, certification, insurance, and industry standards.
For more information on CSAA, visit www.csaaintl.org or contact the ASAP Steering Committee Co-Chairs.

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About Nlets

Nlets is the premiere interstate justice and public safety network in the nation for the exchange of law enforcement-, criminal justice-, and public safety-related information. Nlets, which is owned by the States, is a 501(c)(3) nonprofit organization that was created over 40 years ago by the principal law enforcement agencies of the States. The user population is composed of all of the United States and territories, all Federal agencies with a justice component, selected international agencies, and a variety of strategic partners that serve the law enforcement community—all cooperatively exchanging data. The types of data being exchanged varies from motor vehicle and drivers' data, to Canadian and Interpol databases, to state criminal history records and driver license and corrections images. Operations consist of over 1 billion transactions a year to over 600,000 PC, mobile and

handheld devices in the U.S. and Canada at 45,000 user agencies and to 1 million individual users.
For more information on Nlets, visit www.nlets.org or contact Steve Correll.

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