



Next step: Making it all work together

[The video analytics market begins to integrate with the rest of the security marketplace](#)

By L. Samuel Pfeifle, editor - **01.2008**

Did you know that the Axis 211 IP camera you installed last week is a tripwire camera? It's true. A direction-tracker, too. And it could perform maybe 30 other analytics, with more being added all the time. That IQinVision camera, too. Same thing.

How is this possible? How did the manufacturers neglect to let you in on this little secret? It's because the cameras are simply "Agent ready," meaning it's possible for a piece of Agent Vi software (the Vi Agent, somewhat confusingly) to be freely downloaded to the cameras. That software then performs "universal feature extraction" and sends about 20K of data back to the Vi-Server (which must be bought and integrated into the system, naturally), which can then perform just about any analytic function you've heard or read about, triggering alarms or initiating some other chain of events as prescribed by the end user.

"From an application standpoint, we address all of [an end user's] problems," said Buddy Flerl, chief executive officer at Agent Vi. "They want accurate and robust analytics, with no limitation to the number of analytics that can be provisioned. They know what they want today, but where they're really smart is that they know the stuff is going to get better, and that we'll come up with better ideas." If you believe in the theory of analytics on edge devices, with just small bits of bandwidth being used as information is relayed back to the central servers, Agent Vi offers a way to have your edge analytics and future-proof them, too.

Pretty neat, right?

But it's just one example of video analytics manufacturers integrating their products into the larger security industry and the systems that are being put out into the field on an increasingly regular basis.

ObjectVideo, for example, has recently launched its "OV Ready" program, where manufacturers of devices and software are given a standard way of working with ObjectVideo created data. Or, more precisely, according to OV literature, "Based on XML and open Web services standards, OV Ready enables interoperability between any ObjectVideo OnBoard-enabled device [like a Lumenera camera] and any OV Ready-compliant video management system [like Genetec's Omnicast]. This protocol provides device manufacturers universal compatibility among any video management system adopting the same ObjectVideo standard. Similarly, leading video management systems can build analytic rule configuration and data output interfaces into their own software, and immediately communicate with and manage any number of intelligent edge devices hosting ObjectVideo."

Seems like that might make things easier.

"The fundamental basis of this," said Bob Cutting, managing director of product management at ObjectVideo, "is that we do see an increase in the adoption of analytics. Now we're trying to make

sure from an end-user standpoint that it's as easy as possible to put into solutions and have it all work together." If integrators are working with Genetec or Lenel software interfaces, say, they will no longer need to add in a separate interface for the ObjectVideo analytics.

"Providing a standard interface for us to communicate with is very good," said Francis Lachance, product manager for Genetec. "It fits well with an open architecture solution like Omnicast ... To have an easy-to-use interface for the operator to configure video analytics goes along the same path that we see the Omnicast evolving along as well."

"We don't want to be a square peg in a round hole," said James Mihaychuk, applications engineer at Lumenara. Having analytics on a Lumenara camera would be pointless if the analytics didn't translate to the video management system an end user was employing. "What's interesting about OV Ready," he said, "is that it's providing a bridge between the video management system and the camera and making us part of a complete solution, not just a camera that doesn't interface with anything."

And, quite simply, "ObjectVideo didn't want to force a closed interface onto a customer," said Cutting.

This message of open architecture and standards-based software creation, espoused by end users and integrators at nearly every turn, has reached the ears of manufacturers, said nearly everyone interviewed by Security Systems News.

"Everyone wants them to be seamless and interoperable," said Flerl. "This is the language they speak and how stuff has to work: 'Don't tell me I have to buy a bunch more items. Don't tell me I've got to have a dual stream to shoot something back to a box.'"

However, because this is mostly an elective process on the part of manufacturers, integrators must still research which companies work with which other companies. A universal piece of advice offered by manufacturers is that integrators should ask for a list of interoperability partners, and those in the pipeline, before working with any manufacturer—analytics, access control, camera, software or otherwise.

"The most important thing with us is, 'Who do you have doing it today that we can talk with?'," said Mariann McDonough, vice president of global marketing at Verint, which is often asked to integrate its encoders, for example, with analytics makers. "With video analytics, especially, there are a lot of garage bands out there, and I wouldn't really want to trust my security to six guys who built some really cool technology that's not widely deployed and isn't proven. Any integrator should look at where it's deployed and ask, 'Who can I talk to?'"

Further, said Carolyn Ramsey, director of program management at Honeywell, who came over as the chief executive at analytics acquisition ActivEye, "the security industry is still an industry of proprietary systems. So, in 2008, it's not a reasonable expectation to expect any end user to buy any analytic out there and have it integrate with any access or video management option. So, if we're living in 2008 with everything not integrated, we need to understand end users' needs and priorities and make recommendations about how to help them do what they do better and more efficiently, given the real restraints."

Even if that's sage advice, however, the question remains as to whether there will eventually be a universally accepted standard for communicating video analytic information. And is there a migration path toward that goal? Cutting said, for the time being, ObjectVideo isn't necessarily looking for its standard to be universally accepted.

"I'm not sure we can create a standard for all video analytics," he said. "It would be very time consuming. That's not our immediate goal. We have a bunch of great hardware and video management partners that represent a great portion of the market, and we're just trying to get them

all working together.”

To a similar end, McDonough said she’s lately been interested in creating something like an Intelligent Security Alliance, that puts together vendors who have written to each other’s technology in a published an open forum, “so that integrators know that they can buy a product with anybody in this consortium and know they’ll work out of the box.”

Ramsey said something like that, rather than a formalized industry standards body, might be the quickest way for integrators and end users to get meaningful cooperation and standardization advances. “I have experience in my other life with standards bodies,” she said, “and I believe they are extremely valuable, but very time consuming ... De facto standards often take the market by storm. The more pressure on the marketplace to define analytics in apples-to-apples terms, the better the products that will emerge.”

Maybe a smaller and more immediate goal would be to simply codify what it is that different analytics actually do, to create some nomenclature that everyone could use to move the market forward by establishing common understanding among integrators and end users alike. “If you say, ‘tripwire,’ and five other companies say, ‘tripwire,’ I’m thinking there’s a 90 percent chance we’ll define it the same way,” Ramsey said. “If you say, ‘person loitering,’ there’s maybe a 20 percent chance we’ll define it the same way. There are some rules where it’s very clear what they mean, but where integrators face a challenge is in the more difficult rules.”

“We would welcome an industry body for that purpose,” said Flerl. “We think this is a great idea. In the current marketplace of vendors, everybody’s out there arm-wrestling about whose tripwire is better. Customers are getting tired about a big tripwire pissing match. Those are just applications to us. Those are building blocks. They work.”