



# Analog vs. Digital Video Surveillance: The Fight in the Streets

Integrators and vendors hash out the technology, opinions and details of going IP with video surveillance

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On Tuesday, afternoon, the IP UserGroup USA, an extension of a similar group in the UK, was hosting their Atlanta conference among the skyscrapers of Midtown. Though attendance was thin in the afternoon after stronger morning sessions, the group successfully put on a miniature marketing tradeshow from its vendor participants, and hosted a number of break-out sessions, starting with a keynote address on the "The Truth about IP Security" from Security Technology and Design magazine publisher and editor Steve Lasky. Other seminars included a morning presentation on how Cisco was working on IP video projects by Bob Beliles, the senior manager of Cisco Systems' physical security technology group. Axis Communications brought together a "video master class" taught by technical services manager James Marcella; Fluidmesh Networks presented their wireless video mesh technology.

After a quick tour of vendors' table-top exhibits and a cold cuts lunch, those who remained ventured into a panel discussion about how IP video was better than analog video. The panel featured Dr. Bob Banerjee, Bosch's IP video products marketing manager, Cisco's Bob Beliles, IQinVision's V.P. of sales and marketing Paul Bodell and On-SSI's Brad Anderson. That created a panel of two "all-IP" vendors (Cisco and IQinVision) and two vendors who can swing both ways (Bosch creates IP as well as analog cameras, and On-SSI's software systems can work with both analog and IP cameras).

The panel was intended to be a discussion among the four men on why IP was the best, but it quickly turned into an around-the-room discussion of realities of IP video with local integrators chiming in on their thoughts about delivering the industry's golden child - IP video.

The discussion started directly as panel moderator Andrea Gural tossed out the idea that analog video faced shortcomings that IP video systems were overcoming.

Dr. Banerjee, who heads up IP video products for Bosch, was very candid about the realities facing IP video users.

"I disagree that analog systems fall short," said Banerjee. "IP is often harder, more costly, and it requires a great deal of knowledge to have to set up a managed switch." He asked the audience who could set up a managed network switch (a common piece of hardware for building out a complete network video



system); only two audience members were able to raise their hands. He noted that IP video isn't yet a plug-and-leave situation.

On-SSI's Brad Anderson argued back that IP wasn't as cumbersome as many believed. "A 12-year-old who is blind in one eye can set up IP," said Anderson. He followed with strong remarks on how IP addressing of devices and IP data transmission was anything but new, and said that IP video was really only coming to market today because key security industry players had fought so long to keep it out.

"Analog has been around longer than it ought to have been - and that was because vendors in the marketplace didn't want to make the change," said Bob Beliles of Cisco. "It's a shame that the incumbents in the industry chose not to train you about coming technology."

IQinVision's Paul Bodell added that the challenge wasn't necessarily that there had not been IP security technologies available, but that the channel wasn't yet trained to deliver those technologies. "There are not enough integrators who can balance the needs of the network," said Bodell. But the technology still has to change. "My daughter's cell phone can take a better image than most of the analog cameras being installed today."

At a request from Bosch's Banerjee, the discussion turned to the audience to get input and questions.

One local integrator said that while the vendors were pushing IP like crazy, he didn't see IP on as fast of a curve as the IP believers espoused. "I'm from the IT technology world," he said, "but I don't think people are going to switch over as fast as we'd like to think. I think it's [going to take] 7-10 years."

Another integrator raised the question of whether the industry was adopting the most recent IP addressing standards (IPv6).

Cisco's Beliles was quick to share his thoughts.

"[The] IPv6 [standard] is lagging behind in adoption in the U.S. and in Europe compared to Asia," Beliles admitted. "But the reality is that a number of technologies are available to ensure that IPv4 technologies and equipment will work with IPv6. It is not mandatory to have IPv6, and it is wrong to say that without IPv6, you're not on the cutting edge."

The same integrator who had wondered about the IPv4 to IPv6 transition also asked about trends the panel was seeing in getting network cameras up-to-speed with light sensitivity and infrared lighting.

"IR is the biggest limitation of network cameras," said IQinVision's Paul Bodell. "The CCD still has more sensitivity in the IR range and in low-light environments. Some years ago, you might have said that it was 20-30 percent less sensitive, but that difference between CCD and CMOS is much less noticeable today." Bodell said that current advances are making that gap between network cameras and analog cameras even smaller, and he expected the IR and light sensitivity issue to be negligible.

The general consensus from the integrators at the panel was that, yes, IP video is nice and getting better, but that they were up against concerns over price and bandwidth that are hard to shake.

"It's not us who you have to convince [about the benefits of IP video]. It's the end user or the engineer working for the end user who is making the call," said one Atlanta-area video and security integrator.

Another chimed in that the transition isn't an easy one.

"You have to gracefully approach your client and create a smooth transition to convert them toward an IP world," said a local integrator. That integrator stressed that convincing a client to shift from a major investment in analog video surveillance to one in IP video wasn't as simple or as easy as many in the vendor community believed. Just because they have a business network, he said, doesn't mean they are ready to pay the costs to shift technology.

Banerjee closed the discussion with his status report coming from a vendor company that itself was negotiating the analog to IP video shift.

"I don't think 12-year-olds can set up IP systems," said Banerjee, jokingly referring to one of Anderson's opening statements. "I think it's harder than that. But if that is the case, then you [integrators] are all out of business because I'm going to start a business full of 12-year-olds."

The IP UserGroup USA is online at [www.ipusergroupusa.com](http://www.ipusergroupusa.com).