

An IP system that is and isn't

New installation at Gaylord National has cutting-edge infrastructure, analog edge

BY L. SAMUEL PFEIFLE

When Gaylord Hotels opened its brand-new Gaylord National Resort Hotel and Convention Center on the banks of the Potomac River just outside Washington this past April, it boasted of being “the largest combined hotel and convention center on the East Coast.” With 470,000 square feet of flexible meeting space, 2,000 guest rooms, and a 20,000-square-foot fitness center, that’s not hard to believe.

While that might impress the hospitality industry, the number that’s being touted by ADT’s Advanced Integration (formerly SST) is 735, as in 735 cameras all networked into one video surveillance system, what ADT AI’s regional director of sales Derek Radoski’s calling “the largest non-gaming system on the East Coast.”

The system, designed to keep guests safe and protect the hotel from liability, is an interesting mix of some of the newest technological advances in the security integration industry and traditional analog cameras that could have been installed 10 or more years ago. It is perhaps typical of many installations today, where end users and integrators are adopting what they feel are the most-beneficial pieces of IP-based technology and using workaround and adaptors to retain other non-IP, but trusted, components.

In Gaylord’s case, “they wanted something where they could go either way,” said Radoski.

This means “we actually wired all the cameras with CAT-5e,” said Scott Firesheets, ADT’s project manager for the installation, “so it would be upgradeable in the future to IP, but instead of IP cameras, they used the NVT solution in the closet and a transceiver out at the camera ... and if it was a PTZ, they had the data transmission over the CAT-5 cable as well.”

NVT (short for Network Video Technologies) makes a suite of baluns (short for “balance unbalance”) and other products that allow you to integrate unshielded twisted pair architecture (CAT-2 or better) and coax-based products—i.e. analog cameras.

“So, when they want to upgrade to IP cameras,” Firesheets said, “they would just add a PoE switch, and disconnect the cable from the NVT products and plug in the new switch, and then plug in the IP cameras on the other end.”

Remember that the system was designed roughly two years ago. At the time, Gaylord security director Webb Rizer wasn’t comfortable with the IP camera options available so he decided to wait five or six years until the products available had grown substantially. He didn’t want to be on the bleeding edge for the whole system, and he considered the recording option he’d chosen to be quite progressive: Bosch’s direct-to-iSCSI storage solution, which eliminates the PC or server in the middle of the

NVR equation.

Using Bosch’s VIDOS video management and monitor wall solutions, Gaylord saves considerable IT department resources in maintaining the security surveillance system, said Steven Pennington, partner in manufacturer’s representative Chesapeake Marketing. “One of the big questions that often goes unanswered,” he said, “is: How much does it cost an IT department to maintain a computer? They constantly require upgrading and monitoring, and a guy can average a number of hours each month to do that.”

The RAID storage receives the signal directly “from the encoder in the closet,” said Firesheets, and you view the video through a Web browser on viewing work stations. “Their IT department loved it,” he said. “They didn’t have a rack of servers somewhere, just a bunch of RAID units throughout the facility, so it’s distributed and you don’t need a centralized data center.” This also mitigates some bandwidth issues, he said.

Firesheets also praised Bosch for writing software that drives video to the monitor wall based on motion or door opening. The command center has eight 57-inch LCD monitors, two of which are dedicated to motion-generated video, and each LCD can be split into as many as 25 viewing windows. Further, even with 735 cameras, any camera can be accessed with as few as three clicks thanks to the way the cameras are segmented by location in the building.

“So that was relatively easy to train operators on,” said Firesheets. “If they knew the facility and knew north, east, south, and west, and they know

what they want to see, they can do it pretty quickly. It didn’t take someone having to memorize hundreds of numbers of cameras.”

“They have officers that are watching all these cameras,” noted Radoski, “and they wanted to have attention drawn to where motion is, which isn’t that big a deal, but if you can think about looking at six 57-inch plasmas, that’s difficult. They wanted to have the newest motion pop up on the first location, then old motion is moving, new motion is moving, and the oldest stopped motion is dropping off.”

Firesheets noted that, five years ago, the direct to iSCSI wasn’t possible, and the processing power to move that much video to the monitors wasn’t possible (or wasn’t financially feasible), even if the IP-based infrastructure was already old hat for IT professionals.

This combination of cutting-edge technology and proven technology resulted in “a useful system that I think the hotel will benefit immensely from,” said Firesheets. “They can see what’s going on and they’ve already used it on a number of occasions. It will be a great tool for them for the next 10 years.”



Steven Pennington who is a representative for Bosch and Derek Radoski with ADT stand in front of the new Gaylord National Resort Hotel and Convention Center.