

# Safe Water Supply Deemed Mission-Critical



You can't always hit the ball out of the park on the first pitch and neither can you always be assured of rounding the bases the first time you adopt new technology.



**I**N baseball, technology and just about everything else, life has a nasty habit of delivering curve balls. Such was the case at the South Central Connecticut Regional Water Authority in New Haven, Connecticut, when management began transitioning to digital video surveillance technology in early 2002.

"The unit we purchased just didn't do the job," complained Tony Delvecchio, the Authority's senior supervisor of distribution, cross connections and construction. "It ran on Windows 98 and kept on crashing. Being in the industry we're in, we can't afford downtime. We can't afford to have the security system lock up over the weekend and not know about it."

The South Central Connecticut Regional Water Authority supplies water to approximately 400,000 residents in 12 cities and towns in and around New Haven. Its 15 reservoirs, eight treatment plants, 28 pumping stations, 29 storage tanks and over 1,500 miles of water mains supply an average of 55 million gallons of water to residences and businesses in the region every day.

The Authority also owns 24,000 acres of land, including eight recreation areas and a managed forest, and has its own small police force.

#### Vendor Search

When managers came to the conclusion that their initial DVR purchase wasn't working out, they went back to the drawing board and initiated an exhaustive vendor search.

"We looked at between 10 and 12 different products over a two month period," said Delvecchio.

"This was a mission critical system. We just couldn't afford the downtime we were experiencing."

Delvecchio's team was still in research mode when the local police chief dropped by one day and happened to mention that he knew the March Networks™ regional sales manager. The team had already discovered the March Networks web site and were impressed with what they had seen, so Authority staff were all in favor of someone dropping by for a demonstration.

Armed with the experience of a less than satisfactory product, Delvecchio and his team knew exactly what they were looking for.

### Linux

"We wanted something that was very stable – something running on a Windows 2000 or Linux operating system. That was a key requirement," recalled Delvecchio.

"We were delighted to hear that March Networks DVRs ran on Linux and we were impressed with the ability to scale the bandwidth to our needs."

The Authority purchased two March Networks DVRs in December 2002 and has plans to purchase another three units within the next year.

The installation, performed by local Mitel Networks reseller Omni Communications, was a piece of cake, said Delvecchio. "It was quite simply just a matter of plugging in the cameras, naming them and setting up the event recording. I'll be honest. It took me longer to find the correct length of cable to hook up the DVR than it took to actually configure it. We were very impressed and the fact that we've decided to standardize on March Networks product is a testament in itself.

"It's run flawlessly since day one, and I can tell you it's very rare that we install something that runs without any problems right out of the box." Authority staff have had to review video on several occasions and found the March Networks product far superior in terms of the time required to retrieve specific video clips.

### 10 Minutes

"We've probably cut the time it takes to

review incidents from two to three hours, down to 10 or 15 minutes," said Delvecchio. "With the other DVR, if we wanted to download three or four hours of data, it was at least an hour's wait for that data to come off the recorder. That's how inefficient it was. With the VCR system before that, it was an all-day affair if we had to review something off a tape."

The Authority elected to go with two 300Gb external RAID devices, which will provide 60 days of storage once an additional 32 cameras are added to the system. The DVRs are set up to record 24/7, 365 days of the year on motion alarm.

Running on a subnet of an existing wide area network, the March Networks DVR system will allow authorized staff to access and view both live and archived video from the Authority's main office building and from remote sites.

"With the analog system," said Delvecchio, "designated staff were trained to review video. Now, because it's so easy to use – so intuitive – anyone with access to the software can do it, so that frees up the security staff."

### E-mail

Functionality that allows users to copy and distribute images and video clips as e-mail attachments has come in handy. So has the ability to burn longer clips to CD-ROM.

Digital video recording is vastly superior to tape-based systems and is destined to eclipse them, predicts Delvecchio

"Most organizations that are installing video recording systems now are going digital," he said. "Everybody we talk to is going digital. It's just so much more efficient."

The importance of protecting water supplies has received special attention since the September 11<sup>th</sup> tragedy, but the South Central Connecticut Regional Water Authority, said Delvecchio, has always taken security seriously.

"Our security staff have done such an excellent job in the past that we didn't have to make many modifications. The heightened concern about security is an issue for water authorities generally, but the impact of September 11<sup>th</sup> on us has been minimal." □



### About the Authority

The South Central Connecticut Regional Water Authority provides an average of 55 million gallons of water a day to 103,000 customers, representing approximately 384,000 individuals in 12 municipalities in the south central region of Connecticut.

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