

NETWORK EYES

MAY 2004 EJEMS

BY WILLIAM E. OTT

How would you like to be able to look at any of your agencies truck bays, perhaps the ED docks, personnel parking lots, or other locations close to your operations facilities? Technology has made this a relatively easy and inexpensive process to carry out using web cameras (webcams). Many colleges and small town police departments are adding video capability using webcam products rather than expensive, traditional closed circuit television (CCTV) based systems. Webcams aren't as capable as their CCTV cousins, but they can perform simple observation tasks very well.

Most public safety agencies are moving toward having broadband Internet connections in all of their stations, typically DSL or cable based systems. This type of connectivity is very inexpensive. In addition to connecting the PCs or networks in each facility, you can also use the connectivity to provide security/status cameras at your stations. Moderately priced webcams include their own server that mimics a PC. This allows the webcam to be positioned anywhere in the facility, even where there is no PC.

Webcams can be wired or wireless and only need to share a simple broadband connection to send their signal. You could supply the live video stream to an internal Intranet and maybe post static images once per minute to your public

website. This would allow personnel within the system to look at any facility to see if the vehicles are in, look to ensure the bay doors are down, or any number of other potential uses. Essentially the webcams would become a component of a security system.

Many colleges are using webcams to increase the visual capability of their security departments by placing webcams at the doors of dorms, key facilities, overlooking parking lots and common areas, or in sensitive research areas.

Many small town police and sheriff agencies are doing the same type of thing by placing webcams around town in different business windows to allow them to view key intersections, common areas, parks, and the like.

Using webcam technology provides significant cost savings compared to a traditional CCTV system. CCTV systems usually require special network wiring and leased lines, and the cameras themselves can cost into the thousands of dollars. Some circumstances require that type of technology, but for general close range observation the Internet and a webcam can accomplish the same thing for far less money. A good webcam costs \$150 to \$300, one with tilt, pan, and zoom will run \$600 to \$1000, and one with night vision capability will run \$700 to \$3000. No special wiring is required for a webcam, it simply connects to the broadband Internet connection directly or as part of the network in that building.

The use of webcam technology can add significant capabilities to your management staff by allowing supervisors to take a look at all of the truck bays to

look for units, check bay doors, do security checks, etc... This can all be accomplished for little cost and can be done in such a way as not to be a 'big brother watching' type of scenario. Personnel generally will be far more accepting of the webcam concept if they are also allowed to view them at will.

With the terrorism and general security concerns we all face, you will want to be cautious as to how much video or which still images you would allow to be made available to the public. You don't want the webcam to compromise the security of any of your facilities or personnel by making too many pictures or video of sensitive areas available for public viewing.

An additional use of webcam technology is for monitoring of controlled access areas. Most webcams have motion sensors that can be used to detect movement in a small area and when that movement is detected, the webcam takes a snapshot photo and automatically e-mails it to a certain address. These photos are time and date stamped and can be useful in stopping unauthorized access to restricted areas like supply rooms, computer server rooms, or telecom and wiring closets. I use this type of setup at two of my client sites with great success to ensure only authorized people are in wiring closets. When the camera detects someone walking in the secure room, it immediately snaps their photo and e-mails it to the appropriate personnel. If the subject of the photo is authorized there is no problem, however, if it is a non-authorized person we have an immediate photo record. This obviously has great potential for assisting in securing your medications and supplies and is very affordable to implement.

A new national program developing for homeland security using webcams called US Homeguard created by Jay Walker, founder of Priceline.com. The idea behind this project is that webcams will be placed at nearly 50,000 critical infrastructure sites like water plants, refineries, pipelines, ports, nuclear facilities, and other critical locations. Homeguard would pay people to monitor photos from these sites looking for suspicious activities or people. Persons monitoring the images would earn \$10/hour. Walker is seeking \$40 million from the Department of Homeland Security to get the pilot phase operational. It is a well thought out program and could be both useful and very cost effective. To learn more check the website at www.ushomeguard.org.

You may not have thought about webcams, but how many times have you wished you could see something at a distant station or facility? Using broadband Internet connectivity and webcam technology you can affordably add 'eyes' to your network. Those 'eyes' can help your management staff, improve security, and provide you with nearly live photo content for your public website. I encourage you to do a Google search on the Internet for webcams in your town. Excluding the naughty ones that will surely pop up, you will likely find that your TV stations, radio stations, banks, colleges, airports, and maybe even the corner bar all have a webcam already. Most of these are for public consumption, but looking at them will give you an idea of how you could utilize webcams in a secure, Intranet format to help your operations.

I welcome your comments, criticisms, feedback, and ideas. You may contact me at ejems@cpcstech.com

William Ott is president and chief consultant of CPCS Technologies, a NC-based technology consultancy providing services to the public safety and defense communities. He's been involved in EMS since 1981, in field, education and administrative capacities