Many Locks + One Key= Improved Security

In 2009, Sgt. Tom Graham of the Lincoln County, Ore., Jail Division made a presentation at the Office of Justice Programs' National Institute of Justice (NIJ) Technology Institute for Corrections about how his county took a long, convoluted path and learned many lessons before finally reaching a solution to door control and video integration issues. The annual technology institute provides participants with the opportunity to share their technology challenges and relate success stories, such as Graham's, and some of his fellow participants likely benefitted from the lessons learned in Lincoln County. A successful 2010 pilot electronic key project proved that Graham also learned how to apply them to other Lincoln County technology needs

Graham says he was searching for an alternative to recording hourly cell checks in a manual logbook, because the human memory can prove fallible when it comes to doing the check or remembering to write it in the log book later. In a separate issue, staff members had grown increasingly frustrated with managing the huge number of physical keys required to maintain security in the jail system.

"I started looking around for solutions and I ran across a technology that addressed both issues," Graham says. "It easily converts an existing locking system into a wireless access control product. Best of all, it was made by a local vendor that came right out and wanted to work with us."

The Jail Division had struggled with several vendors before finding the right one during a previous door control/video integration project. Graham said during the presentation that the division went through years of upgrades, and he didn't want to ever repeat it on another project.

Lincoln County implemented a successful 30-day test of the electronic key system in July in one 34-bed minimum security housing unit and plans to eventually expand its use throughout the division.

"The way the system works, all of our traditional keys have been replaced by electronic keys that are reprogrammed daily," Graham explains. "An officer comes on duty, goes to the key vault and checks out the key, then goes to a synchronization station and enters a code representing the day's tour of duty. The system then downloads appropriate lock access."

Thus, the many large and heavy keys once carried by an officer have been replaced by one electronic key that opens only authorized locks. Officers use the same key to do their hourly "inmate welfare checks." When the key touches an appropriate lock, it automatically records data related to that check. When officers turn in their keys at the end of the shift, staff download the data into a computer database that electronically replaces that old manual logbook. The key's memory is then wiped clean. A planned upgrade will send an alert to an officer's supervisor if an officer misses an hourly lock check.

"We're cautious people [a lesson learned during the previous project]. We didn't find any information on similar systems deployed in our area, so we decided to do a test phase," Graham says. "We did one unit to make sure it did what we expected it to do, and we were very happy with the results."

Several reasons drove the project's inception, starting with the expense involved in changing locks if an officer loses a key.

"A lost key might be the most expensive object on the planet," Graham says. "With this system, if an employee loses a key, we take our master key and go to the perimeter locations and download the information on the lost key. If someone tries to use it, it is disabled. It takes only a five-minute walk around the exterior doors to kill the

key. Before, we had to rekey all of the locks. The savings are astronomical."

He adds that keys can also be set with an expiration date. "For example, my key for my personal office expires every 10 days. If I don't get it reauthorized, it just expires."

With the pilot project successfully completed, Graham says Lincoln County is now planning phased implementation in the rest of the Jail Division. He considered numerous other technology solutions before finding this one during an Internet search. He remembered having seen the technology at a conference and contacted the company about starting a pilot project.

"I think that it's a going to be a very cost-effective solution in the long run," he says. "We won't be replacing tumblers anymore, we will simply be reprogramming, and the ability to collect data is a huge asset."

For more information on Lincoln County's use of the Cyberlock system, contact Sgt. Tom Graham at (541) 265-0702 or tgraham@co.lincoln.or.us. For more information on NIJ's Corrections Portfolio, contact Program Manager Jack Harne at jack.harne@usdoj. gov/.