



Protecting Evidence with RFID Technology



Every officer understands what's at stake with a crucial piece of evidence. Managed properly, it can help convict a person of a crime. But if that same evidence is mismanaged or misplaced, a criminal could walk free. "When you are dealing with evidence, you are dealing with chain of custody," says Alan Martin, Commander at Lexington Police Department, in Kentucky. "You have to do everything you can to keep the integrity of the evidence from being questioned." For Commander Martin, that meant exploiting technology to increase the efficiency of how evidence is identified, logged, stored, and checked in and out of Lexington's property and evidence room. This police department is using RFID technology from a company called FileTrail, in San Jose, California, to quickly locate and secure some 60,000 pieces of evidence housed in its 5000 square foot evidence room at any one time.

What is RFID: The acronym stands for Radio Frequency Identification. The technology works by attaching an electronic tag to an object (such as a piece of evidence from a crime scene) and assigning a unique identification number to each tagged item. The tag stores key information about the item, such as the case number the piece of evidence is associated with, where the evidence was found, when, and by whom, it was checked in and out of the storage facility, and so forth. Using an RFID reader, that information can be wirelessly transmitted to a computer database. RFID technology is not new. Businesses have used it to manage inventory and run warehouses for some time, and companies of all kinds rely on it to track files. More recently, law enforcement agencies are adopting it to manage property and evidence rooms.

Pinpoint Evidence More Precisely: FileTrail RFID tags improved the efficiency of the Lexington Police Department's evidence and property room. The old system, which relied on barcode technology, specified where the piece of evidence was stored, but it couldn't zero in on the exact location as precisely as RFID. That meant evidence technicians relied on eyesight to find smaller pieces of evidence. One time a small item in a small package literally fell down between two larger items, recalled Commander Martin. "A lot of time and effort went into finding it," he said. "With RFID, we could have narrowed down that search considerably."

Better than Barcodes: Barcode technology systems, such as those used in the supermarket checkout line, cannot "read" information encoded in barcode label without making direct contact with that label. "Barcodes are good but they are not smart," said Gayle Spence, Vice President of Sales and Business Development for ColorTrieve Systems, a provider of records management solutions in Burlington, Massachusetts. By contrast, RFID technology lets you program an item number into a handheld reader. "It beeps and also displays a 'found your file' message," she said.

Sound the Alarm for Better Security: The new RFID system adds a crucial layer of security to the property and evidence room, said Commander Alan. If a piece of evidence leaves the storage facility without having been properly accounted for, an alarm sounds.

FileTrail's

SmartAlarm feature provides control over an exit to prevent unauthorized removal of tagged items from that area. Each alarmed area can be set to sound a siren, activate a light, and/or send email notifications, said FileTrail CEO Darrell Mervau. What's more, by carefully tracking where each piece of evidence is at any given time, the RFID system provides an audit trail. You can use that information to prove a piece of evidence has not been tampered with or mishandled.

More Ways to Search: Another advantage of new RFID system is that it uses a Web browser as the computer interface. That has made Lexington's evidence technicians who use the system more efficient. They can search the database virtually any way they want. "The most common search is by case number," said Mervau. "But you could also carry out more complex searches, such as "show me all rifles where cases have closed," or "show me all evidence that can be destroyed (based on evidence and property policies implemented in the system)." That flexibility is a big change from the department's earlier evidence management system, where technicians used computers with black screens and green text, he said.

Biggest Challenge of Moving to RFID: The time invested up front to write the code to connect the new RFID system with the department's other information systems, says Commander Alan. But the investment has been worthwhile, he said. In addition, the move to RFID has helped Lexington Police Department carry out two of its core values: utilizing technology to boost efficiency, and maintaining a quality work environment for its employees. "We are exploiting technology to improve the work process," he said. And when you improve the work process, employees are happier, he said.