

Marin County DA Saves With RFID

The district attorney for Marin County, Calif., says his department will trim 2,500 man-hours a year thanks to a 3M RFID system that lets it locate legal files.

By Claire Swedberg

Apr. 5, 2005—Searching for missing legal files at the Marin County District Attorney's office in San Rafael, Calif., is no longer a matter of sending out e-mail messages and looking through piles of papers. Instead, with the installation of a 3M RFID system, the office file tracking system is on the office computers. That means that a search for files involves checking on the desktop PC to determine who most recently worked with the file. If that staff member has trouble locating the file in his own office, a handheld device can then pinpoint the file with a beeping noise.

"It's dramatically reduced the number of e-mails sent out looking for files," says Marin County District Attorney Ed Berberian Jr.

"The major benefit for this system is ... it reduces cost," says Joal Storm, marketing development manager for the 3M Security Systems division, in St. Paul, Minn. The elimination of man-hours spent searching through offices looking for files could save a 3M RFID system user thousands of dollars a year, she says.

The system comes with four components: 2-inch-by-2-inch passive RFID labels, which are embedded with a Texas Instruments' Tag-It chip and adhere to the inside of a file folder; the database software, which runs on a Microsoft SQL server; an RFID tracking pad, which acts as the tag reader; and the handheld tracker.

Office clerks can apply an RFID label to a file folder, and add information to the software system about that file, such as the file's numerical code and name. The file can then be checked in or out of a location (such as a file room or an individual office) by placing its folder within range of the 13.56 MHz tracking pad with a built-in RFID antenna and a cable that plugs into the office computer system. When checking out a file, users can select their name from a drop-down box in the software. Or they can use an employee tag (an employee tag uses the same RFID label used for file folders, but hold the user's name rather than file information) and pass that over the pad before scanning the files.

The pads, which are about the size of a typical mouse pad, can be placed on a desk or mounted on the wall. One file or even a stack of files can be placed against the pad and the pad will emit an audible tone to announce that the files have been checked in or out. The pad can read a pile of files as much as 12 inches in height or depth, Storm says.

The handheld tracker, which looks like a PDA with a handle and antenna, can be taken to the vicinity of a missing file (which the user can input into the device) and alert the user as to the file's exact location. After users input the name or identifying number of the missing folder, the handheld device will match up information coming from the files it scans and will beep when it finds the correct match. If a tagged folder has been misfiled on a shelf or in a file cabinet, the device will recognize that the folder is out of numerical order and alert the user. Any file cabinet would have to be opened for the scanner to read the folders' tags.

"The handheld tracker is an optional piece of equipment," Storm says. However it was an option the Marin County DA's office, home to about 40 attorneys, chose to take. They have about four of them, says Berberian. A total of 11 pads have also been deployed throughout the DA office's 120 different work and filing areas. It took 3M technicians two days to install the complete system.

The system has been marketed to legal offices for several years (see [RFID Brings Order to the Law](#), but the Marin County DA's office adopted the system within the past six months. Other district attorneys and legal offices, as well as medical clinics where there is a high volume of files that travel throughout the offices, have all expressed interest in deploying the system, Storm says. "Most customers have seen a payback in less than 12 months."

The initial investment averages about \$50,000. RFID labels cost about 95 cents each, and most offices order between 5,000 and 10,000. Pads are about \$800, and the software—a client-server architecture that resides on the users' PCs—can cost \$18,000 or more, depending on the number of users. Handheld devices cost \$6,799 each.

The district attorney's office in Maricopa County, Ariz., which includes the city of Phoenix, also installed the 3M RFID system this year.

In Marin the system is expected to save approximately 2,500 person-hours per year, according to Storm, that previously were spent searching for, and recording, active and misplaced files. The system also helps keep file inventory current: Using 3M RFID handheld trackers, clerks scan each of the 40 attorneys' offices twice per week so they know what files are where.

Berberian says inventory trackers enter each attorney's office several times a week and scan the attorney's RFID tag posted on the wall. The attorney's location tag is the same type as those affixed to folders, but it carries the attorney's name, rather than folder information. Once the inventory clerk scans the attorney's tag, the device compiles a list of which files are in that attorney's office. "The bulk of things we handle is paper and files," Berberian says. "In our office we have thousands of files we need to track." He says that when the system was installed about six months ago, the initial reaction in the office was that it was "too much like Big Brother," but now the office staff uses the 3M's tracking system exclusively.

The only drawback, Berberian says, is that the handheld devices need to be held within about 3 inches of the files to read their RFID tags. "It would be nice to have more range," he says.

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