Maryland Court Tries UHF RFID File-Tracking System

The 7th Judicial Circuit Court for Prince George's County plans to use EPC Gen 2 tags to track legal documents for 30,000 to 40,000 cases a year.

By Claire Swedberg

Aug. 15, 2006—The 7th Judicial Circuit Court for Prince George's County, Md., is in the process of installing an RFID file-tracking system provided by FileTrail. The court plans to use the system to track files for 30,000 to 40,000 cases annually. Initially, the RFID system will be used in the criminal and juvenile divisions of the main courthouse.

With the new RFID system in place, the court will automate the tracking and management of case files (also known as case jackets) used to hold legal documents. This will spare employees from having to search manually for the files. FileTrail's vice president of product strategy, Tom Pemberton, says his company's system uses EPC Gen 2 UHF (902 and 928 MHz) passive tags, unlike competing systems utilizing HF (13.56 MHz) tags. The UHF tags' greater read range, he says, makes it easier to track case jackets.

The FileTrail RFID tracking system includes devices called DeskTrackers and ZoneTrackers. DeskTrackers are small RFID interrogators that attach to desktop computers. The system is based on the EPC Gen 2 UHF standard, Pemberton says, which enables the DeskTrackers (which have a read range of 4 feet or more) to capture tag data automatically as files are placed on an employee's desk. ZoneTrackers, which act as RFID portals, are installed one on each side of a doorway. They capture data about the file as it enters a room, thereby making it possible to track files judges' chambers and other offices where they are not necessarily stacked near a DeskTracker.

The court is installing 58 DeskTrackers throughout the courthouse, as well as four handheld interrogators and ZoneTrackers for 70 portals to enable court staff to locate files as they move from one office to another, from an office to a court room, or into a judge's chambers. The court will pay between $200,000 and $250,000 for the entire system, including 100,000 tags at 32 cents apiece. The system should be fully deployed by Nov. 1.

Currently, each new case at the Circuit Court is assigned a file. Eventually, numerous files might be assigned to the same case. Each file receives a color-coded label, depending on the kind of case, and is printed with the name of the party involved in the case. Details about the file are hand-keyed into the court's database, and new details are input by hand throughout the life of the case, such as the file's current user and the case's status.

"This is both labor-intensive and relies on staff to make entries into the system," says Joretta Meyer, the IT director at Prince George's County Circuit Court. "Searching for cases when needed is frustrating, as the data in the case-management system may be incomplete."

Court workers often find themselves searching for case files. "There are several reasons why a case jacket may be needed [by court staff]," Meyer explains. These include accommodating requests from a judge's

chambers, other offices or the public, as well as processing incoming paperwork (pleadings, lines of appearance, court orders, and so forth). If someone needs a file not found on a shelf, that person must do a physical search, send e-mail messages or make phone calls in an attempt to locate it. The FileTrail system, Meyer says, will alleviate the need for manual tracking of case jackets, while providing up-to-date location status.

With the FileTrail system, a court employee creates an RFID label printed with the case name on the appropriate color-coded label, then attaches it to the case jacket. Each time the folder's RFID tag gets within read range of one of those RFID interrogators, its tag's unique RFID number is transmitted via a Windows 2000 server to the SQL 2000 database, updating data about the file.

Several other government offices across the country are using RFID to track legal files, but those systems typically use 13.56 MHz tags, which have a much shorter read range than the system being deployed by the Circuit Court for Prince George's County. In Marin County, Calif., the district attorney's office is using a 13.56 MHz system from 3M's Security Systems division. With that system, users must hold the interrogators within about 3 inches of the files to read their RFID tags, according to Marin County District Attorney Ed Berberian Jr. (see Marin County DA Saves With RFID).

The FileTrail's longer read range, however, makes it easier for staff to adopt and use, Pemberton says. "In a lot of environments, management has trouble getting people to change and getting full compliance." In this case, employees don't have to think about the system because DeskTrackers and ZoneTrackers read each file's unique RFID number every time they move a file onto a desk or through a doorway with the readers installed.

The handheld interrogators are Windows-based mobile devices that can be used for tracking and audit purposes, allowing staff members to search for all case jackets to ensure they are not misfiled. The devices can scan all files in a room if an employee is seeking a specific file, saving time otherwise spent thumbing through a stack of files on someone's desk.

The court eventually plans to expand the RFID tracking system to other locations and divisions, though no specific dates have yet been announced.