AUTOMATE FILE AND FOLDER, RECORD AND EVIDENCE TRACKING

Improve efficiency and compliance with RFID

Files, folders, records, charts, books, photos, tapes, CDs and DVDs, evidentiary exhibits — in many industries, some form of physical media is central to the process of doing business. Information is gathered, retrieved, referenced, filed and moved from location to location for various types of processing. Some of these physical records, such as legal evidence, financial records or medical charts, must be carefully tracked to meet chain of custody or privacy requirements. Temporarily misplaced assets can be a serious problem, wasting hours of staff time and productivity. Even more serious is the liability exposure your organization could face should a critical file be stolen, tampered with or lost.

When "good filing" and trust-based check-out systems aren't enough, RFID offers a practical, affordable answer. An RFID file tracking solution automates the process of file tracking, providing fast inventory and location, rules-based access control and full compliance reporting. With RFID, you can virtually eliminate lost files, audit and fully document access and chain of custody, and improve productivity for every member of your staff who handles critical files.

KEY BENEFITS

- Automated collection/ management of physical record data
- Improved productivity
- Fewer inventory errors
- Automated and cost-effective regulatory compliance
- Fast record retrieval
- Integration with related business systems, such as inspection and maintenance applications, improves return on investment for existing technology investments

BUSINESS CHALLENGES

Managing more than paper

Despite bold predictions that are more than 35 years old, the paperless office isn't reality yet. Nor is it likely to become reality any time soon. Every country in the Western world uses more paper today, on a per-capita basis, than it did just ten years ago.

But "files and folders, records and evidence" are now – and always have been – more than stacks and drawers of paper. In many businesses, multimedia items such as photos, tapes, CDs and DVDs are in the mix. Within the legal system, files include forensic evidence, such as blood and tissue samples, articles of clothing or weapons. Libraries and academic collections share irreplaceable historical artifacts and documents for research and study. Mortgage closing documents or patient charts include not only routine reports and correspondence, but also requisite signed contracts and other executed forms.

The weaknesses of manual systems

Even though organizations in every industry are broadening efforts to digitize their records, the need to manage physical record assets will persist. The more important those assets are, the more time-consuming and onerous the manual systems to track them seem to become. And of course, any system that trusts human beings to dutifully check out, track and check in important files is subject to the foibles of human beings. There will be errors. There will be well-intentioned subversion for

the sake of getting the job done and, unfortunately, there could also be ill-intentioned subversion in the form of theft or tampering.

When documents go missing, not only can hours of productivity be lost, but critical timelines can be affected, as well. A misfiled surveyor's report can delay a real estate closing. A mislaid physician order can hold up the delivery of an important treatment. Careless handling of a legal exhibit or a filing document can require rescheduling a court date. If the missing file cannot be found, everything comes to a halt.

Regulatory compliance

In many industries, file and physical record tracking is mandatory and also has important regulatory implications. Complying with laws such as the Health Insurance Portability and Accountability Act or Sarbanes-Oxley not only requires that an organization has systems in place to secure only authorized access to sensitive data, but that control must be demonstrated in mandatory checks at specified intervals. Mandated inventory reports must be accurate and reconcilable. Systems must be in place to report delinquent returns of monitored files, which requires an auditable trail of who has had access, when, where and for what purpose.

To meet these challenges, many organizations are proving that an automated passive UHF RFID file tracking system is the most efficient, effective solution.

INDUSTRIES

A wide range of enterprises rely on files and folders, and records that must be accurately tracked and located, including:

- Government agencies
- Courts
- Law offices
- Medical organizations
- Finance
- Insurance and mortgage
- General office environments
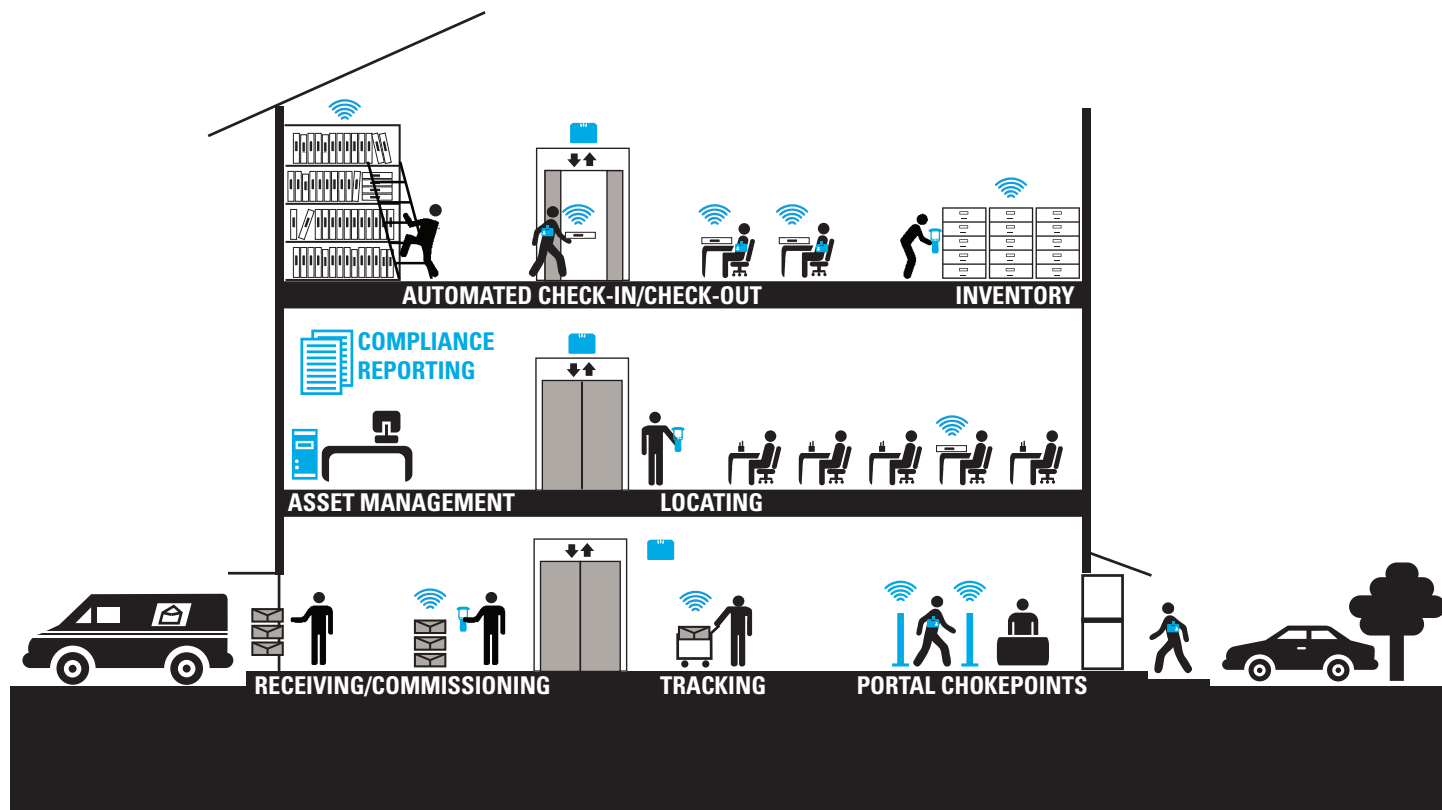- Libraries
- Pharmaceuticals
- Healthcare

APPLICATIONS

- Efficient and automated tracking, locating, archival and retrieval
- Regulatory compliance
- Web-based status retrieval and analytic reporting
- Role-based access (who can access what, when and where)
- Check out and returns management
- Bulk pull facilitation
- Unauthorized access allerting
- Departmental billing based on access
- Box, container and reusable tote management

HOW PHYSICAL RECORD TRACKING TECHNOLOGIES COMPARE

	BAR CODE	HIGH FREQUENCY (HF) RFID	ULTRA HIGH FREQUENCY (UHF) RFID
Performance	Low	Limited	Highly efficient
Range	Line of sight requirement means more manual processing	Limited to about two feet; not suitable for many environments; limited inventory and tracking	6-10 feet and virtually 100% accuracy; suitable for broad range of applications in most environments
Read Throughput	Only one item can be read at a time	Low; not suitable for most high volume item-level applications	High; efficient for fast, simultaneous reads of large item quantities
Suitability	May be a viable backup	Dominated by proprietary systems	Flexible and affordable
Ease of deployment	Easy, though tags may be vulnerable to wear or vandalism	May be legacy in certain large institutions or cooperative systems	Highly scalable and flexible; suitable for many applications and settings
Cost	Inexpensive	Proprietary tags and readers are often too costly for smaller organizations	Standards-based readers and tags provide affordable interoperability
Maturity	Mature	Mature; no longer evolving	Proven and growing innovation

A passive UHF RFID-based File Tracking System

AUTOMATED CHECK-IN/CHECK-OUT **INVENTORY**

COMPLIANCE REPORTING

ASSET MANAGEMENT **LOCATING**

RECEIVING/COMMISSIONING **TRACKING** **PORTAL CHOKEPOINTS**

SOLUTION: RFID FILE TRACKING

Using RFID technology, you can fully automate the tracking and locating of physical files and documents, including authorizing access, recording check-in/check-out, providing inventory counts and all associated reporting. Automation with virtually 100% accuracy means that the cooperation of the people using your files is no longer an issue. If a tagged document comes within range of a reader, its data will be captured.

The figure above outlines how an RFID file tracking works within an organization. The process begins when a critical document is received. The file is commissioned into the RFID asset tracking system by adding a passive UHF RFID tag to the record. RFID tags are typically small adhesive labels that can be easily applied to files and folders, records and evidence. The tagged item is then received into inventory and added to the asset management database using a handheld or hands-free RFID reader.

From this point forward, the document can be tracked as it moves through chokepoints throughout the facility. If a staff member needs to reference the document, a query of the asset management system can now reflect the file's last

location. If the document's circulation is controlled, staff simply requests it. If a document cannot be found, RFID handhelds provide a unique locating capability in the form of audible cues that increase in sound, and an increasing bar on the handheld screen, when the handheld gets closer to the lost item – much like a geiger counter. Access can also be authorized by the staff member's RFID-enabled badge. If the document is moved from its current location, a fixed RFID reader automatically updates the database with information about who took the document, when they took it and where they took it. If the document is not to be removed, an alert sounds automatically when it passes by a portal chokepoint equipped with an RFID fixed reader. No manual check-in or check-out process is needed.

Overdue notices can be triggered if the document has been out of the system longer than business rules allow. The system can also monitor file activity and generate a retention report for records due for archiving or destruction. Inventory of document storage areas can be quickly updated with a handheld RFID reader, while regular reports can be generated to demonstrate regulatory compliance.

COMPONENTS OF AN RFID FILE TRACKING SOLUTION

- Handheld and hands-free RFID readers for commissioning, inventory and locating tagged files

- Fixed readers for automating movement tracking at portal chokepoints or in aisles, on shelves and in storage rooms

- Passive UHF RFID tags, available in sizes and configurations to suit virtually every type of physical record

- Asset management software

Typical File Tracking Applications for RFID

GOVERNMENT AGENCIES

File Types
- Case files
- Registered files
- Correspondence
- Financial records
- Historical records

Key requirements
- Maintain public records in a way that is accessible, but controlled.
- Demonstrate regulatory compliance
- Streamline processes to be more effective stewards of public funds

BENEFITS of RFID
- Eliminate lost files
- Track and locate files easily
- Create auditable trails of access to public records
- Automatically generate compliance reports

FINANCIAL ORGANIZATIONS

File Types
- Contracts
- Financial instruments
- Property titles

Key requirements
- Manage documents on specific timelines, such as real estate closings, refinancing, etc.
- Eliminate labor- and time-wasting processes to compete more effectively
- Meet strict regulatory mandates for privacy and document retention

BENEFITS of RFID
- Track files easily and efficiently
- Increase billable activities – time and cost savings
- Improve customer response time
- Competitively differentiate service to customers
- Automate access/retention rules to handle the growing volumes of corporate records
- Automatically generate compliance reports

COURTS AND LAW OFFICES

File Types
- Evidentiary exhibits
- Motions and filings
- Contracts

Key requirements
- Minimize disruption for staff, attorneys and judges
- Maintain chain of custody documentation

BENEFITS of RFID
- Locate and retrieve case files quickly and efficiently
- Boost staff productivity
- Track retention and purge outdated documents more easily
- Improve service to both the court/legal community and the public

MEDICAL ORGANIZATIONS

File Types
- Patient charts
- Pharmacy records
- Lab and imaging reports
- Medical devices

Key requirements
- Comply with HIPAA and other privacy regulations
- Meet regulated responsibility to safeguard patient records against loss or unauthorized access
- Control visitor, patient and other non-hospital personnel access to sensitive information

BENEFITS of RFID
- Ensure clinical access without compromising patient privacy
- Demonstrate, audit and document regulatory compliance
- Locate critical clinical files/devices quickly, minimizing clinical time spent searching
- Ensure data capture for accurate billing

LIBRARIES

File Types
- Books
- Periodicals
- Multimedia, including CDs, DVDs and tapes
- Microfilm and slides
- Special collections
- Rare documents

Key requirements
- Monitor and protect all assets while providing appropriately open access to library users
- Circulate resources efficiently
- Ensure items are located properly within the collection, so they can be found by users
- Add items to the collection efficiently

BENEFITS of RFID
- Improve client service by finding misshelved items quickly
- Minimize replacement cost for lost/stolen assets
- Automate commissioning, check in/check out, past-due notices and reserve notices
- Boost staff productivity

USE CASE #1

county government simplifies records access while improving security

The county government of this fast-growing southern community operates a huge warehouse of records, more than 50,000 boxes containing everything from legal paperwork to irreplaceable historical photographs. At one time, the bar code scanning system for accessing the materials had been state-of-the-art, but the original vendor was no longer in business. Each department kept its own records of what was stored in the facility: there was no master list or compilation of box identification numbers or their contents. A pending move to a new warehouse prompted the county to seek a more efficient way of protecting and accessing their files.

Today, the records warehouse includes RFID fixed readers at all entrance and exit doors, as well as all rows, aisles and shelves. The readers allow employees to maintain an accurate log of a box's location, when it is checked out or in, and by whom. For regulatory compliance, the closed-loop RFID infrastructure has been outfitted with lights and buzzers to alert staff when an unauthorized user attempts to carry documents out of the warehouse. Using RFID handheld readers, the warehouse team is now able to complete a full inventory of materials in just a matter of days – the previous system required months to complete the same task.

USE CASE #2

circuit Court takes 40,000 case files in hand

The county Circuit Court of this large metropolitan area tracks some 30,000 to 40,000 case files each year. Each new case begins with a single folder, color-coded and labeled with the name of the parties involved, but most cases eventually grow to include many files. Historically, details about each file, its current user and status have been manually keyed into the court's database, then updated throughout the life of the case. This tracking system was labor-intensive and hardly foolproof; data was frequently out of date or incomplete, and often significant time was spent physically searching for case files that were not where they were supposed to be.

The court decided to automate case file tracking using RFID. Labels for new case files now include a passive UHF RFID tag. A combination of short-range RFID antennas at each court worker's desk and longer range RFID fixed readers at key portals throughout the court building track the movement of every file, updating the court database in real time. The system's ease of use has been a major factor in its swift adoption; employees don't need to even think about file tracking. Simply placing a file on a desk or carrying it through a doorway automatically records the latest location and/or user, dramatically enhancing staff productivity.

USE CASE #3

Insurance Company covers claims tracking across multiple offices

A regional insurance company's claims tracking had been managed in a central database, with each of its 35 business units operating its own file room. Staff at each unit manually updated claim status in the database by recording who/when files were checked out for each stage of processing, then returned to the file room ready for the next step. Theoretically, an authorized user in any office could check a current claim's status simply by reviewing the database. However, rapid growth and an influx of new personnel were playing havoc with the system. Nearly a third of files could not be located on first attempt. When a large batch of claims simply "disappeared" because they were not properly checked out, the company turned to RFID for a better system.

Each staff member was issued an RFID-enabled badge encoded with their name, access authorization and role in claims processing. When a new claim is received, the claim file is "opened" in the database by scanning an RFID-tagged folder with a handheld reader. A fixed reader at the entry to each business unit's file room scans both the ID badge and any claim files coming in or out, instantly updating the central database. Unauthorized access sounds an alarm; if a file is out for longer than expected, the current user is notified by e-mail. Accurate claim status is now available company-wide in real time, while average staff time spent on claim status updates has been reduced from about three hours per week to virtually nothing.

ABOUT ZEBRA RFID SOLUTIONS

Zebra helps organizations gain increased visibility of their key business processes through automation, offering an innovative portfolio of RFID solutions for inventory, tracking and asset management applications. Our comprehensive offering includes a business and industrial line of fixed, handheld and mobile RFID readers, all designed to be simple to operate, comfortable to use and easy to integrate with your existing data-capture technology and back-end systems.

FOR MORE INFORMATION ABOUT HOW ZEBRA CAN HELP YOU IMPROVE THE EFFICIENCY AND REDUCE THE COSTS ASSOCIATED WITH TRACKING AND LOCATING FILES AND DOCUMENTS IN YOUR ORGANIZATION, VISIT www.danbygroup.com

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