

# Intermec RFID Case Study – March 20, 2008

## Gators Gain with New RFID Solution

*Intermec IF4 serial readers used in rodent tracking system to reduce labor, improve employee morale and increase revenue by 20 percent*



The University of Florida Animal Care Services department is home to approximately 35,000 mice and 3,000 rats housed in over 11,000 cages. These rodents are used in research studies to find cures for various diseases. Similar to the way a hotel operates, the University provides housing and care for rodents for a fee. This fee is paid for by the grant funding the research project.

## Rodent Tracking Troubles

In order to assess facility charges and compute rodent census reports, UF employees previously tracked cages manually using handheld bar code scanners. The scanners read the bar code symbol that was printed on an index card attached to each cage. This is a time consuming endeavor taking as much as one second per cage.



In addition to being time consuming, the manual census process was also prone to inaccuracies. When counts were not properly totaled, hand counts were taken to reconcile the difference. Additional labor was expensed when cages were inadvertently placed in the wrong area and needed to be relocated.

“In order to increase our efficiencies, we knew we first had to optimize some of our processes,” said Dr. August Battles, Director of Animal Care Services at the University of Florida. “Scanning individual bar codes took too long

and tied up our employees with tedious manual labor. However, it was an imperative component of our operations in order to guarantee revenue—we just needed to do it more efficiently.”

In addition to reducing scanning labor, the department also needed a way to help optimize invoicing processes. In an average month, the center invoices more than 400 researchers. In one room, as many as 20 different investigators might be applying several different protocols on rodents, charging the services to one specific research grant. Tracking charges accurately was a tedious task.

In order to optimize the department’s census counts and invoicing procedures, Dr. Battles turned to Dynasys Technologies, a data collections solutions firm based in Clearwater, Florida, for a solution.

### “Rat”ical Solutions

Dynasys developed an automated solution using the latest RFID technology available from Intermec. UHF Generation 2 RFID tags were affixed to each individual cage in the animal care facility. Intermec UHF RFID readers are utilized throughout the process to provide rapid and accurate tracking of each cage from the instant the cage is inducted to the time it is checked out of the system.



Each RFID cage tag contains information regarding the specific details about the rodent, project protocols and the researcher assigned to that program. Now, when employees take a census count, they simply roll a mobile RFID reader cart through the rooms. The cart integrates an Intermec IF4 reader, power supply and a WiFi

connected laptop computer running the Dynasys Animal Care software application. As the cart rolls past hundreds of rodent cages all the information is captured without errors. This solution provides real-time data about the cages in each room and the animal care technicians are immediately notified when tags are detected that indicate an incorrect cage location and corrective action can be taken.

“Since the implementation of Dynasys’ RFID solution, we have seen tremendous labor savings,” said Dr. Battles. “Now it only takes one minute and 30 seconds to collect data for one animal room versus 30 minutes using the bar code technology.

In addition to labor savings, the department has received positive feedback from researchers. The new solution provides researchers detailed account information and validation that they are being invoiced the correct amount which has led to a reduced number of grievances. Dr. Battles estimates that the department has increased revenue by being able to accurately capture the census.



However, to Dr. Battles, the most important return on the department’s investment in the new solution has been improved employee morale.



“The RFID solution has led to increased job satisfaction,” said Dr. Battles. “It eliminated a mundane manual routine from their list of job responsibilities, freeing up time to accomplish more substantial tasks. In addition, staff members no longer experience the frustration of attempting to find lost cages or the source of a discrepancy in census counts”.

Since its deployment, Dr. Battles has made several presentations at National Meetings on the value of RFID tracking. “The more rodents a facility houses, the more beneficial the system will be to an animal care operation,” said Dr. Battles. “This is an investment that will pay for itself within just a few years, so any facility that must track animals for research should consider this solution.”



While the department has yet to capitalize on all of the solution’s capabilities, Dr. Battles already has plans for other processes to optimize using RFID technology. For instance, inventory management is another area where he would like to see the solution applied.

“We have a large volume of equipment that needs to be inventoried and cleaned on a regular basis,” said Dr. Battles. “By tagging each piece of equipment, we can develop a system that helps us count, clean and maintain inventory to increase its lifespan. This will also help us locate items that are misplaced. There are just so many opportunities. The more we use the RFID solution and learn its wide scope of capabilities, the more applications we will be able to optimize using RFID technology.”

