

### **A Texas canine day-care center uses passive EPC Gen 2 tags to track when animals arrive and leave, enabling automatic billing and quicker entrance to the facility.**

By Claire Swedberg

Aug. 6, 2009—Canine customers at Dallas' [Unleashed Indoor Dog Park](#) arrive sporting RFID tags on their collars, and ready to play in what is billed as the world's first indoor dog day-care center. The RFID tags enable four-legged clientele to enter and exit the facility gates in a matter of seconds, while enabling automatic billing to the animals' owners. The company can utilize the same system to track the park's usage, as well as accomplish financial transactions without hiring large numbers of employees to handle the tasks.

According to Cody Acree, Unleashed Park's CEO, the system was installed, integrated and customized by [Identysol](#), a British RFID solutions provider. There are several patents pending for some of the technology and its usage for this application, he says, to be shared by Unleashed Park and Identysol.



*At Unleashed Indoor Dog Park, four-legged customers sport EPC Gen 2 RFID tags attached to their collars.*

Thousands of dogs visit its facility for socializing and indoor exercise, the company indicates—which may not be possible outside, given the hot weather of a Dallas summer day—while the animals' owners can relax in a Wi-Fi-enabled lounge, or have a snack at the café. The animals can also be left at the site, to be watched and walked by trainers. The dogs can be released and cared for in a large open indoor area, or in a separate section designed for their needs, such as rooms specifically set aside for puppies, large dogs or aging pets. On Saturdays or other busy days, when the center can be visited by 500 dogs or more, many staff members would be required to confirm pet identification and complete payment transactions. Such a time-consuming process would result in a long queue of dogs and their owners.

Instead, to allow its customers to quickly enter and exit, and to track the dogs' activity, the park needed a wireless tracking solution. Acree's firm first approached [GAO RFID](#), the solution's hardware provider. GAO brought in Identysol to design the reader infrastructure and provide a software system that Unleashed Park could then use to track and appropriately bill its clients.

interrogators at each of the two entrances and two exits, which are paired side by side. Each pair is equipped with a reader with two antennas. Identysol integrated electronic gate locks with the system so that an authorized RFID read can prompt the gates to unlock, thus enabling an authorized dog to enter or leave the park.

The system was installed with the business' opening in March 2009. Identysol deployed [Sirit](#)

When new customers arrive at the center, they first fill out information regarding their dog, such as its breed, vaccination history, health records and disposition, as well as payment information, such as a credit card number. That data is input into the [Kennel Connection](#) pet facility management software

used by Unleashed Park. An employee takes a plastic dog tag and employs an RFID desktop interrogator to read the unique ID number encoded to the EPC Gen 2 RFID inlay embedded within that tag. That ID number is then linked to that data, and the tag is attached to the dog's collar.

Following the registration process, each time a dog arrives at the park's gate area, the RFID inlay in the animal's tag responds to the interrogators by transmitting its unique ID number at a read range of 1.5 meters (4.9 feet); the entrance and exit gates themselves are each 1.5 meters wide. The tag's ID number is sent to Unleashed Park's back-end system, where Identysol's WavZoom software confirms that the ID number is valid and has been properly read. The ID number is transmitted to the Kennel Connection software, which verifies that the dog's vaccination and other information is up to date, and then on to third-party financial-management provider [Trust Commerce](#), which links the ID number to encrypted credit card information. Once the credit card number is verified, the cost of the visit is deducted from the customer's account. The WavZoom system then illuminates a green light and releases the gate's magnetic lock. "All of this happens in a matter of a few seconds," Acree says.

This solution aims to minimize operational costs by reducing the number of workers required for check-in. It not only accomplishes this goal, Acree says, it also speeds up the check-in process and improves the customer experience. In addition, employees can use the system with WavZoom to track the number of dogs entering the facility, when they arrived and how long they stayed before exiting, among other activities.

While the automated check-in time normally takes less than two seconds, says Siddharth Malani, Identysol's CEO, a traditional check-in would require a minimum of several minutes. "Not just that," he says, "customers would have to wait in a queue during rush hours, which may take much more time."

Building the system to operate with WavZoom, as well as the Kennel Connection software and the Trust Management third-party database, was what led to the creation of a custom proprietary system, Malani says. "It was complicated," he explains. "We had to work with their developers and invent new ways of solving problems, and we had to help them make the necessary changes to connect to our application smoothly."

"We had to build the system from the ground up," Acree states, "using the WavZoom system to create a custom interface" with Trust Commerce and the Kennel Connection software. In the future, he notes, the company may add each dog's photo into the Kennel Connection software, so that staff members can verify an animal's identity.

Unleashed Indoor's Dallas dog park is so successful, according to Acree, that the firm is now looking to open additional parks in other parts of the country, such as areas with inclement weather. Each site would use the same RFID-enabled system, he says.