

**The resort chain has launched a system allowing guests to use RFID-enabled wristbands to unlock guest room doors and make payments.**

By Mary Catherine O'Connor

Mar. 22, 2006—[Great Wolf Resorts](#), a Madison, Wis., firm operating six Great Wolf Lodge water parks, is issuing RFID wristbands to patrons at its resort in [Pennsylvania's Pocono Mountains](#). The wristbands' embedded 13.56 MHz tags are used for keyless room entry; purchasing food, game tokens and other items; and entering to the resort's water park. The wristbands also act as a means of identifying the patrons as guests.

"The main benefit of the system is the convenience it provides our guests, and we're a company motivated by customer service," says Dale McFarland, general manager of the Pocono resort. "Our guests don't need to be concerned with carrying a wallet or room key, because their wristband acts as an ID door key, and they can use it to make payments."



*Dale McFarland, Pocono Mountains*

Since its grand opening in October 2005, the Pocono resort has issued roughly 200,000 of the wristbands to its guests. Initially, they were used only for keyless guest room entry and entrance to the resort's indoor water park, but in January the resort launched the RFID-enabled payment system. Guests can now use the wristbands to make purchases at any of the resort's gift shops, spa centers or refreshment stands. RFID-enabled payment terminals use the patron ID encoded to the wristband's tag to link the charges incurred to the guest's room account, or to deduct them from a prepaid debit account linked to their wristband ID. Guests can establish these debit accounts and refill them at either the RFID-enabled kiosks at the resort or the hotel's front desk.

To enter a guest room, a guest holds the wristband within a few centimeters of an RFID interrogator built into the door lock. To purchase souvenirs or food, or to play an arcade game, one uses the wristband the same way, holding it within centimeters of an RFID-enabled payment terminal.

[Precision Dynamics Corp.](#) (PDC), a San Fernando, Calif., provider of cashless payment and identification systems, supplied the wristband and payment infrastructure. To devise the payment and keyless entry systems, PDC worked with Great Wolf and [Hafele](#), which provided the RFID-controlled locks for the guest room doors and guest lockers, as well as [Springer Miller](#), which makes the point-of-sale terminals used at the resort.

The ISO 15693-compliant [Texas Instruments](#) tag embedded in the wristband is used both for payments and access. Thus, the data encoded to the tag must be partitioned and protected on the inlay. A unique ID number, associated with the guest's account in the hotel's database, is generated for each guest and

encoded to separate parts of the chip's memory. To enable the wristband to access doors and lockers, Hafele uses a proprietary encryption method to save the ID number to one section of that chip memory. It uses date and time stamps to enable entry based on the guest's profile. To enable the wristband to be used as a payment device, PDC encrypts and encodes the same ID number to another part of the chip's memory, using its own encryption method so that only the [Feig](#) interrogators linked to the point-of-sale terminals in the resort can be used to make transactions.

The same wristband system for access control and payments will also be utilized at the new [Great Wolf Lodge](#) in Niagara Falls, Ontario, Canada, slated to open in April 2006. McFarland says Great Wolf is also considering deploying the system at resort locations in Ohio, Texas and Washington. The company won't say how much the RFID-based system costs, but indicates it is significantly more expensive than using key cards for room access and non-RFID wristbands to gain entrance to the water park through manual inspection rather than an automated entrance system. Guests at other Great Wolf Lodge locations are currently issued key cards and non-RFID wristbands. The company claims it's too early to say when it will recoup its investment in the RFID system, but believes the system will improve its guests' experience at the resort, through added convenience and less worry, and that this will translate into greater patronage.

McFarland says he is also looking at linking RFID payment terminals to the computers and digital photo printers in the hotel's business center, so that guests will be able to use the wristbands to check e-mail and print photos taken with their own digital cameras.