

**A Japanese clothing maker places garments on hangars fitted with EPC Gen 2 tags, enabling it to track the items during their final stages of production.**

By Claire Swedberg

March 18, 2008—A Japanese apparel manufacturer has been using an RFID-based method for tracking shirts, pants and jackets as it sews on buttons and presses the garments before shipping them to retailers. The company, which prefers not to be named, deployed the FlexNet tracking system (provided by software solution provider [Apriso](#)) at its site in Mikuni, Japan, to track where its garments are within the facility, and to enable retailers to order products online.

With the RFID technology, the apparel maker can automatically track garments' locations to help expedite movement in the facility and avoid out-of-stocks, and retailers can log onto the FlexNet Web site to order items electronically. The system, installed and integrated in late 2007 by [Toyo Business Engineering Corp.](#) (B-En-G), uses Apriso's FlexNet platform to translate data from the RFID readers, and to make that data available to the apparel maker and its customers on the Web-based FlexNet server, hosted by Apriso.



*Tiago Wright*

The garments—mostly business suits—are manufactured in a Chinese factory. The outfits are then packed in boxes and shipped to the Mikuni facility. When the items arrive, workers unpack them and put them on hangers with embedded EPC Gen 2 RFID tags from [NEC](#). Employees utilize a bar-code scanner to capture each box's bar-code label encoded with the items' SKU number.

To link the items' SKU with the tag ID numbers, the items are carried through an NEC RFID interrogator running on [Oracle](#) middleware. The reader transmits its data to a computer linked via an Internet connection to the FlexNet server, says Tiago Wright, Apriso's product manager, alerting the company that those specific items have been received. The garments are then stored until they are moved to the pressing and inspection location, where buttons are attached and the clothing is pressed and prepared for shipment.

As the clothing is carried to this location, an RFID interrogator captures the hangers' tag ID numbers once more. If a garment is found to be flawed upon inspection, it is taken to the return area, where a reader captures the hanger's ID number and employees press a prompt indicating the item is being returned. In that way, the item is removed from inventory records. Another RFID interrogator, located at the point of shipping, captures the tag ID numbers as the garments are loaded onto trucks. Employees then remove the outfits from the tagged hangers, which can then be reused.

Retailers can use a password to log on to the FlexNet Web site and place orders for specific items, which are then shipped from the plant. They can also log on to the site to determine whether—and

when—a shipment has been sent out.

The Japanese clothing maker employs the RFID system to track the movement of items within its facility, to determine how long they stay in a specific location and to ensure inventory is available for orders. By using the system, Wright says, the company is able to save time employees would otherwise have spent tracking its inventory.