

Hewlett-Packard has removed more than 30 RFID readers and middleware to make its RFID system less intrusive and easier to deploy at other sites.

By Mark Roberti

Oct. 28, 2008—[Hewlett-Packard](#) (HP) launched an ambitious plan in 2004 to track the production of printers with radio frequency identification tags based on Electronic Product Code (EPC) standards. Over the past year, the company has been removing interrogators and middleware. No, it isn't dismantling the program, which won the 2007 [RFID Journal Award](#) for Best RFID Implementation (see [Best RFID Implementation: Keeping Tabs on Printers](#)). Instead, it has been optimizing the system to make it less intrusive to employees, and easier to roll out to other facilities.

The biggest change is that the company has removed its RFID middleware, with data now flowing from the readers directly to HP's manufacturing execution software (MES), via an application program interface written by the company. "Our MES is used in almost all our printer manufacturing plants around the world, so when we roll this system out to other facilities, it will be much easier," says Reinaldo Villar, operations development and RFID program manager for [Hewlett-Packard Brasil](#). "There will be no middleware to configure."

HP still has its workers apply an EPC Gen 2 RFID tag to the chassis of every printer or printer engine they produce at the Brazilian facility, but the company has eliminated more than 30 readers from the printer plant outside of Sao Paulo. At one time, it had as many as 100 interrogators at the site, but now, it uses approximately 70 such devices to capture data. The readers were removed because HP has been continually improving the system to reduce the impact radio frequency identification has on its manufacturing operations. The firm does not want its staff to have to present tags to the interrogators, or to slow printers as they move down the assembly line so they can be read.

In seeking ways to achieve this outcome, Hewlett-Packard was able to get rid of some readers without reducing its ability to collect information. HP replaced an interrogator on its portal between the manufacturing plant and the warehouse with a [ThingMagic](#) Mercury 5 reader. Instead of being able to read only 15 to 20 percent of the EPC tags on printers and printer engines (which are shipped out and finished in other countries), the portal is now able to read 100 percent of the tags. "This will enable us to do some new applications," Villar says. "For instance, we will be able to do an audit of the printers on the pallet as they move from the manufacturing area to the warehouse."

HP has already determined that the system has reduced by 17 percent the quantity of printers it needs to keep in inventory at the warehouse, and that it has eliminated bottlenecks at the factory, where pallets of printers or printer engines were often lined up so they could be counted before being put away at the warehouse. The company has not yet made a decision regarding when it might roll out the RFID system at other printer manufacturing plants, most of which are located in Asia, but Villar says his team would continue to improve the system.

Additionally, Hewlett-Packard has tagged much of the facilities' machinery with hardened EPC tags from [Intermec](#). Staff can inventory these high-value assets by wheeling a mobile RFID reader up and down the aisles.

Related Articles

[Ortrander Ironworks Rolls Out Real-Time Location System](#)

[Tego Launches 32-Kilobyte EPC RFID Tag](#)

[Zhenuine Introduces Consumer-Controllable RFID Tag, Online Registry](#)

[Paddling to Profits](#)