GenuOne Takes a Vertical Focus

The product-tracking software maker has upgraded its RFID-based product, TraceGuard, and incorporated features explicitly for the pharmaceutical, CPG and premium-brands sectors.

By Mary Catherine O'Connor

Jan. 25, 2005—Last year, the Federal Drug Administration (FDA) came out in support of using radio frequency identification (RFID) as a method of creating an electronic pedigree, which shows a drug's chain of custody from the point of manufacture to the point of dispensing and is useful in fighting counterfeit drugs, ensuring product quality and enabling product recalls (see FDA Endorses RFID Technology. Also, last year Wal-Mart started requiring its suppliers of Schedule II drugs (pharmaceuticals the U.S. government defines as having a high potential for abuse. and severe psychological or physical dependence) to place EPC RFID tags on individual units shipped to Wal-Mart's Bentonville, Ark., pharmacy warehouse. Increasingly, members of the pharmaceutical supply chain are looking for efficient, workable solutions for creating electronic pedigrees while also integrating RFID for product tracking to reach retailer mandates.

To address this need GenuOne, an RFID software vendor based in Boston, this month introduced TraceGuard V3.0 for Life Sciences. The product is an upgrade of the 2.5 version of the TraceGuard, released in 2003 (see Software for Bar Codes and RFID). The new version combines RFID infrastructure software with an electronic pedigree tool.

Jeffrey Unger, CEO of GenuOne, explains that TraceGuard V3.0 for Life Sciences is composed of three components: a device-management and data-collection layer that aggregates the data collected from the RFID reader devices; a data-management engine on which business rules are applied to guide data processing; and a top level that includes the electronic pedigree function specific to users in the pharmaceutical supply chain. This layer uses a proprietary authentication tool to collect data on the handling and transport of pharmaceutical products per FDA requirements for an electronic pedigree.

What makes this product unique, says Unger, is the combination of these separate layers into one product. This lets users seamlessly integrate the RFID-generated data for tracking items in the supply chain, as mandated by retailers such as Wal-Mart, and for tracing and authenticating drugs as required by the FDA. TraceGuard V3.0 gives a unified solution so that users do not need to add products from various vendors to satisfy these different requirements.

The platform can be used to process data from serialized bar codes and other technologies used in pharmaceutical tracking. The software can be used with hardware from Alien Technology, Symbol, Philips, Texas Instruments, Tyco, ThingMagic, SAMsys and Printronix. It could be set up by GenuOne to support other hardware for customers within a five- to seven-day period, says Unger.

The software, which has an open-source architecture and is written in extensible markup language (XML), can be integrated with a user's existing enterprise resource planning or warehouse management systems. Another feature of the software platform is its ability to accept standardized data generated by supply chain intermediaries that do not run GenuOne software.

"TraceGuard might be used in two or four tiers along the supply chain, but because it's an XML-based application, the software can integrate information passed on to it electronically," says Unger.

GenuOne is also releasing two additional editions of TraceGuard V3.0, one with a focus on consumer packaged goods (CPG) and the other with a focus on premium brands, such as Nike, Timberland and New Balance. The first two software layers (device management and data collection) of all three editions are identical, but the third layer of each edition has a different vertical focus. For the CPG product, that layer includes a rule- and event-based management tool for complying with mandates from retailers on how to process data from tags on cases, pallets, and eventually individual items. The version for specialty brands includes these functions as well as anticounterfeiting tools to ensure the authentication of name-brand products.

Moving forward, GenuOne might have to make adjustments to these vertical-function layers depending on changes within the pharmaceutical, CPG and specialty-brand industries. For example, as FDA regulations change regarding track and trace, GenuOne might need to alter its software. It also might need to make adjustments to reflect regulatory changes made by individual states.

GenuOne developed the framework of the TraceGuard V3.0 to handle those types of adjustments, and to handle an ever-increasing data stream.

"This new version of the software has a broader focus on scalability and robustness [than version 2.5]. We really thought long and hard about the number of transactions that can go through the system, the number of devices that can be linked into the system and the way that the system integrates and talks with all those devices," says Unger.

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