

IBM Adds E-Pedigree Features to WebSphere RFIDIC

Drug distributor AmerisourceBergen says it plans to test the software's electronic-pedigree capabilities as part of its current RFID pilot.

By Beth Bacheldor

Aug. 15, 2007—IBM has announced the addition of electronic-pedigree (e-pedigree) features to its WebSphere RFID Information Center (RFIDIC) software. The new features will enable companies to create e-pedigrees—secure documents that record a drug's progression throughout the supply chain, from the point of manufacture to the pharmacy.

According to Christian Clauss, director of sensor information management products with the IBM Software Group, WebSphere RFIDIC's e-pedigree features are designed to help companies comply with new and emerging regulations, such as California's e-pedigree requirement, slated to take effect in January 2009. Among those features is the ability to generate serialized e-pedigrees, which contain a unique ID number, or serial number, for each bottle, case or pallet of prescription drugs manufactured, sold and distributed in the pharmaceutical supply chain. The serial numbers are correlated with other information, such as the drugs' manufacturer, their batch numbers, other companies handling the drugs and so forth.

Designed to facilitate the exchange of RFID data among trading partners, government agencies and other entities, WebSphere RFIDIC became commercially available in December 2006 (see IBM Launches Software for Sharing RFID Data). The software is based on EPCglobal's standard for Electronic Product Code Information Services (EPCIS) software, which serves as a communication mechanism between applications and data repositories, enabling companies to effectively exchange and query data from within their own RFID processes, and also with partners.

By using an EPCIS-compliant system to create e-pedigrees, companies will be able to more easily exchange necessary data among trading partners in a supply chain, Clauss explains, as well as access key data for other business applications, such as managing drug expirations or recalls. "The idea here is you don't just want to be compliant with laws like California's e-pedigree requirement. You want to gather as much information as possible about the drug," he says.

In addition, IBM has added reporting tools and alerting features to the new version of WebSphere RFIDIC. The alerting tool, for example, helps companies set up processes to issue warnings to appropriate personnel if a drug shipment is late, has been recalled or perhaps is about to expire. Companies such as Cardinal Health (see Cardinal Health Deploying Drug E-Pedigree System) and AmerisourceBergen are currently conducting e-pedigree initiatives.

AmerisourceBergen launched a pilot in May 2007 (see AmerisourceBergen to Conduct HF/UHF RFID Pilot), testing both high-frequency (HF) and ultra-high-frequency (UHF) passive RFID tags on inbound cases and totes carrying a mix of items, says Shay Reid, the company's VP of integrated solutions. The pharmaceutical

distributor, an IBM customer, is also testing EPCIS-based communications with its trading partners.

AmerisourceBergen is currently using WebSphere RFIDIC, with plans to employ the software's e-pedigree capability. "We want to use IBM's EPCIS e-pedigree product with a trading partner to prove out the EPCIS-enabled e-pedigree," Reid says, "as well as interface IBM's EPCIS with existing business applications to develop new customer solutions for track and trace."

To prepare for the California law, AmerisourceBergen is working toward RFID-enabling all three of its California facilities. Still, the company's ability to fully comply with the looming law is largely dependent on whether drug manufacturers tag their products before they enter the supply chain. "We have indications from pharmaceutical manufacturers that not all pharmaceutical products will be serialized by the Jan. 1, 2009, implementation date," Reid says, "which would limit our ability to comply."

RELATED_ARTICLES The pharmaceutical industry faces several challenges in moving toward full e-pedigree compliance, Reid notes, including the lack of uniformity regarding e-pedigree requirements among various states. The costs and complexities associated with implementing e-pedigree capabilities also pose challenges, not just for companies like AmerisourceBergen, but others participating in the pharmaceutical supply chain as well. For instance, manufacturers will need to implement serialization in all existing product lines, but doing so will be costly and require changes to product packaging.

"Wholesalers have to understand the different options that manufacturers may use to serialize, and the different means that manufacturers may provide serialized information," says Reid. "We also have to change processes to be able to receive product with different forms of serialization." Such serialization types could include two-dimensional bar codes and RFID/bar-code combinations. Moreover, pharmacies will have to determine the best time to implement the technology, as well as change existing operations to incorporate serialization.

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