

Register Now! | Benefits | Login



InformationWeek

BUSINESS INNOVATION POWERED BY TECHNOLOGY



Part of the TechWeb Business Technology Network

SEARCH

- RSS FEEDS
- SUBSCRIBE
- EVENTS
- HOME

- NEWS
- WINDOWS
- SECURITY
- OUTSOURCING
- INTERNET
- SOFTWARE
- HARDWARE
- MANAGEMENT
- RESEARCH & TOOLS
- INDUSTRIES
- CAREERS

Industries Tech Center: • News By Vertical Industry • Government • Blog • Healthcare • Banking • Wall Street & Technology • Insurance • InformationWeek Download

When RFID Is Everywhere, How Will You Cope

Companies to make sure they have the hardware and software in place to manage the enormous amount of data that will be generated by millions of tags

By [J. Nicholas Hoover](#)
InformationWeek

Oct 16, 2006 12:00 AM (From the October 16, 2006 issue)

Every emerging technology has its choke point and problem area, and RFID is no exception. Most rollouts of radio frequency identification have been limited in size, and many RFID readers plug directly into dedicated applications so there's minimal interference and data overload. But when tags start getting thrown around like candy at a parade, companies will need hardware and software in place to manage, direct, and troubleshoot data across multiple sites and millions of tags.

- » E-Mail
- » Print
- » Discuss
- » Write To Editor
- » Digg
- » Slashdot

Related Stories

- » [Cisco, SAP Invest In RFID Startup](#)



Advertisement

Get the top ten best practices based on successful RFID implementation, now.



Enter companies like Reva Systems and its Tag Acquisition Processor, which filters RFID data from networked RFID readers, manages those readers, and sends the data to back-end systems such as SAP and SQL Server, all from one appliance. Reva earlier this month said it had received \$13.5 million in venture capital from Cisco Systems and the investment arm of SAP, among others. The investments could give Reva's network appliance-based management strategy an advantage over often less-functional middleware approaches. "Cisco and SAP are really ratifying our approach," Reva CEO Tom Schuster says.



RFID today is similar to wireless networks of five years ago, when companies would install a bunch of access points and then manage them all separately, IDC analyst Jean Kaplan says. RFID readers often are managed the same way.

Vendors Fall Short

"People are frustrated," says Ike Nassi, SAP America's senior VP for research. "They're ready to move, but the RFID industry isn't ready to meet these demands." ABI Research recently scaled back the projected revenue in worldwide RFID software and services for next year from \$3.6 billion to \$3.1 billion.

Most RFID middleware is either like Progress Software's Apama line, which pools and monitors data coming from tags, or BMC's WebLogic RFID Edge Server, which sends the data to back-end applications. Reva's Tag Acquisition Processor does both. Despite this, Reva has only a short list of publicly announced customers, including AT&T and Hewlett-Packard.

One of Reva's few true competitors is Omnitrol Networks. Each Omnitrol device pulls data from RFID readers, monitors and manages the readers, provisions that data for back-end systems, and sends it off to be processed. Like Reva's box, it obviates the need for multiple types of hardware and software in the middle of the process. It also can gather information from bar code scanners and sensors and act as a wireless access point, but it converts traffic into fewer formats than Reva.



"Practitioners are looking for more choices for managing RFID data. Some prefer a bundled data management and hardware solution--à la Reva--while others look for RFID support from their preferred middleware vendor--à la BEA," says Christine Overby, a Forrester Research analyst.

Dutch bookstore chain Selexxy is one of those that hasn't signed on to Reva's model. It started implementing item-level RFID tagging in one of its stores last year and has plans to expand RFID deployments to eventually tag millions of books for theft deterrence and so that the bookstore can tell shoppers exactly where a book is on the shelf. It's using Apama to filter out unrecognizable or duplicate RFID data.

Network Overload

Cisco's investment in Reva underlines the coming traffic burdens RFID will put on networks. Over time, there will be billions of RFID tags, and they will need to be in constant communication with networks, says Alan Cohen, senior director of mobility solutions at Cisco. "We're just at the beginning of the intersection of active networking and RFID," he says. Cisco already got into RFID, last year releasing a Catalyst 6500 blade containing AON software and RFID middleware from ConnecTerra, now owned by BEA, to filter and load-balance RFID traffic.

Meanwhile, SAP has been involved in RFID for five years and is "heavily focused" on watching the market, says SAP Ventures investment partner Jennifer Schultz. The more RFID tags out there, the better the intelligence that can be fed to SAP's ERP systems. The company is working with EPCglobal and other industry groups to develop standards, and it's also working with Palo Alto, Calif., to use RFID to track the city's

InformationWeek Marketplace (Sponsored Links)

Disaster Recovery and WAN Acceleration

This technology brief covers 8 common challenges customers experience when installing WAN accelerat...

[Buy a Link Now](#)

SPECIALTY RESOURCES



Whitepapers, case studies, webcasts, videos, and additional resources to address pressing IT issues affecting your business

- ▶ PCs with down-the-wire proactive security and manageability
- ▶ Ensuring the longevity of your IT investment
- ▶ Autonomic Computing: Roadmap to Self Managing Technology
- ▶ Oracle Instant Portal Demo
- ▶ Learn pros and cons of managed print services solutions

[VIEW ALL BRIEFING CENTERS](#)

FEATURED MICROSITE



Advertisement



fire engines. In addition, SAP has supplied funding to T3Ci, which performs analysis of RFID data.

[Download A Free PDF Of This Article At informationWeekDownload.com >](#)

Over the near term, it looks as though RFID management challenges are here to stay. Long term, however, increasing use of active RFID tags may change that. There are fewer layers of management involved with active tags. They send data to wireless access points instead of having to be periodically scanned for information, so reader management isn't necessary. But at more than a dollar a tag, they're still too expensive for widespread deployment.

Beth Israel Deaconess Medical Center is an early adopter of active tags, using them to keep track of medical equipment. "Tracking devices across multiple sites is very easy because we know which wireless access points they're associating with," Beth Israel CIO John Halamka says. "Using wireless access points, which we manage centrally, makes scaling quite straightforward."

Whatever the future holds, RFID still has a long way to go before the system architecture is completely sorted out. "There's new [technology] being designed all the time," SAP's Nassi says. "We're just at the tip of the iceberg in this stuff."

Illustration by Carl Wiens

Advertisement

- » [E-Mail](#)
- » [Print](#)
- » [Discuss](#)
- » [Del.icio.us](#)
- » [Digg](#)
- » [Slashdot](#)
- » [Reprint This Article](#)
- » [Download Top Reports](#)

InformationWeek Marketplace (Sponsored Links)

Disaster Recovery and WAN Acceleration

This technology brief covers 8 common challenges customers experience when installing WAN accelerat...

Buyer's Guide: WAN Acceleration Solutions

Jim Metzler, leading analyst and Network World contributor, has written a buyer's guide for WAN acc...

Security Within - Configuration based Security

Configuration based security is a pro-active way to defend against attacks. Click for whitepapers.

FREE WP - Remote IT Management

Remote IT equipment? No need to worry! With SecureLinx you can easily manage, troubleshoot and main...

Test out the #1 Help Desk Software

Test out the new version of Numara Track-It! - the leading help desk solution featuring coverage fo...

Buy a Link Now

- [On-demand Webcast explores best practices for master data management.](#)
- [Security Event Manager White Papers, Reviews, and End User Case Study](#)
- [Stop spending 75% of your budget on maintenance. Learn more from Forrester](#)
- [Spend less time managing your PCs and more time focusing on strategic business initiatives](#)
- [Stop data leakage in its tracks with policy-based controls](#)

Current Issue

View all stories from our [current issue](#)



Illustration by Ryan Etter
View stories from [past issues](#) sorted by date.

Subscribe to [InformationWeek Magazine](#)

Search Jobs on CMP's TechCareers

Keyword(s):

Function:

State:

[Post Resume](#) | [Employer Area](#)

Featured Jobs:

[Insensys seeking Senior Systems Service Specialist in San Juan, PR](#)

For more great jobs, career-related news, features and services, please visit [CMP Media's TechCareers](#).

Focus On

(sponsored links)

[Attaining application management that lives up to its name.](#)

[Don't wait to automate: Transform IT management. Free white paper has details](#)

Microsite Of The Week

Powerful Information at your fingertips (sponsored links)



- » [Enterprise solutions for protecting the data center](#)
- » [Stop data leakage in its tracks with policy-based controls](#)
- » [Case Study: BMW increases remote management capabilities with vPro](#)
- » [Learn to love event-driven SOA](#)

Subscription Info

Apply for a free 52-week subscription to InformationWeek (a \$199 value)

First Name: <input type="text"/>	Last Name: <input type="text"/>
Company Name: <input type="text"/>	Title: <input type="text"/>
Business Address: <input type="text"/>	City: <input type="text"/>
State: <input type="text" value="SELECT STATE"/>	Zip: <input type="text"/>

Email Address:

[CONTINUE](#) ->

NOTE: Offer valid for U.S., U.S. possessions, & Canada only

- [News](#) » [Windows](#) » [Security](#) » [Outsourcing](#) » [Internet](#) » [Software](#) » [Hardware](#) » [Management](#) » [Research & Tools](#) » [Industries](#) » [Careers](#)
- » [About Us](#) » [Contact Us](#) » [Site Map](#) » [Media Kit](#) » [Editorial Calendar](#) » [White Papers](#) » [Briefing Centers](#)
- » [Privacy](#) » [Your California Privacy Rights](#)

- Other CMP Sites:** » [Optimize Magazine](#) » [Informationweek Germany](#) » [Network Computing](#) » [Dark Reading](#)
- » [Light Reading](#) » [InternetWeek](#) » [TechWeb](#)

[Terms of Service](#) [Copyright © 2006 CMP Media LLC, All rights reserved.](#)