



Avoiding the Expense of RFID Asset Tracking Infrastructures

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THE PROBLEM

BY ANNE ROOS

Gary Moe, President and Founder of ID Integration, was in a quandary. “Potential clients were interested in an RFID system that combined both bar code and RFID technology.” He examined passive RFID tags, but wouldn’t settle on a new RFID tagging solution until it was both affordable and beneficial to his clients.

He wasn’t satisfied with passive RFID tags for location tracking. Because these tags rely on power supplied by the reader, they require antennas to pick up radio waves from a nearby reader to energize the circuits in the tags. Passive tags are limited by the fact that they can only be read at short distances of just 10-20 feet. Therefore, fixed readers—costing thousands of dollars apiece—must be installed at each chokepoint within a facility for complete functionality of the tags.

Mr. Moe was also seeking ease-of-use. Installing multiple fixed readers, along with network connections, costs time and money in labor. Additionally, when an asset is moved, these readers don’t report where the asset is relocated. Errors in asset location with passive tags are costly in terms of the man hours spent looking for missing parts and equipment.

There had to be a better way to accomplish efficient RFID location tracking, without the expensive costs associated with building an infrastructure to support the system and downtime locating assets. Moe wanted to find a simpler, state-of-the-art RFID asset tracking technology that could be applied across a wide range of applications.

The Solution

Moe's company, ID Integration, accumulated over 20 years of experience offering systems integration solutions. It provided tool-tracking technology for Boeing and RFID tracking and direct part marking technology for airplane structural wing parts. He turned to InfinID Technologies, because they also have similar experience providing government groups and agencies with IUID technology. "We've been a partner of InfinID for over 10 years," Moe stated.

InfinID Technologies created the V-Tag™ active RFID tag solution. ID Integration conducted two pilot programs in the aerospace industry, and based on the overwhelmingly successful results, ID Integration released it for commercial use. Both pilot customers followed up with large installations in their plants of the V-Tag™ technology. Besides providing efficient RFID asset tracking to aerospace and government customers, this system has a wide range of applications across many business sectors, including government, military, fire and rescue, and health care.

But the most important reason why Gary Moe green-lighted the release of InfinID's V-Tag active RFID tag location technology is that it costs nearly HALF the price of passive RFID tag systems!

Why is V-Tag™ Active RFID Technology So Cost Efficient?

V-Tags make passive RFID location systems look antiquated. Gone is the cost of antennas and fixed readers. Gone is the cost in labor, spending weeks or months in installation. And gone is the cost of untold hours spent locating assets that have moved.

Rather than relying on nearby readers to power up, V-Tags are battery-powered. They are designed to "wake up" and transmit information when moving, so their battery life can last an average of four years. They are easy to affix to your important assets, as each tag is about the size of a box of Tic Tacs. Small and powerful, V-Tags are capable of transmitting across distances of up to 300 feet.



V-Tag™ active RFID tags “talk” to each other by creating an ad hoc mesh network that relays information, thus eliminating the need for building complex, costly infrastructures. This system may require only one “gateway reader” which can be installed simply with industrial-grade Velcro. Moe states that, “With an entire mesh network, you can actually track items up to a half mile in some instances.” Imagine an inexpensive RFID tracking solution that goes far beyond warehouse walls!

Coupled with AssetWorx! active RFID asset tracking software, a V-Tag™ gateway unit relays asset location information to a central database. V-Tags™ that are not moving send updates every hour to a computer, tablet or smartphone. The locations of each tag appear on custom software maps of your facility, so that you can view the location of each asset in real-time. Move your assets, and the facility map refreshes to show the updated locations. Easily change your plant floor plan without the concern of misplacing parts and equipment. This innovative RFID active tag technology simplifies verification of shipment contents that are received and shipped out.

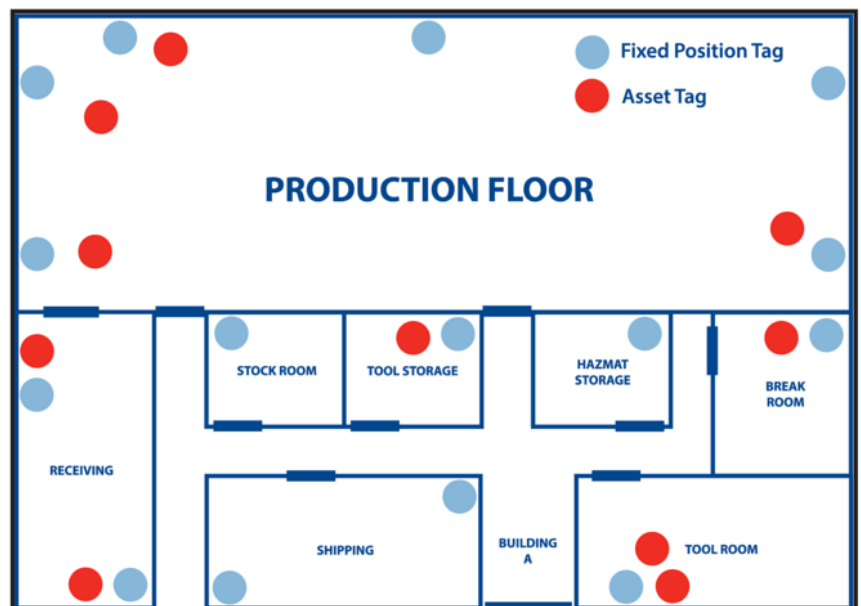
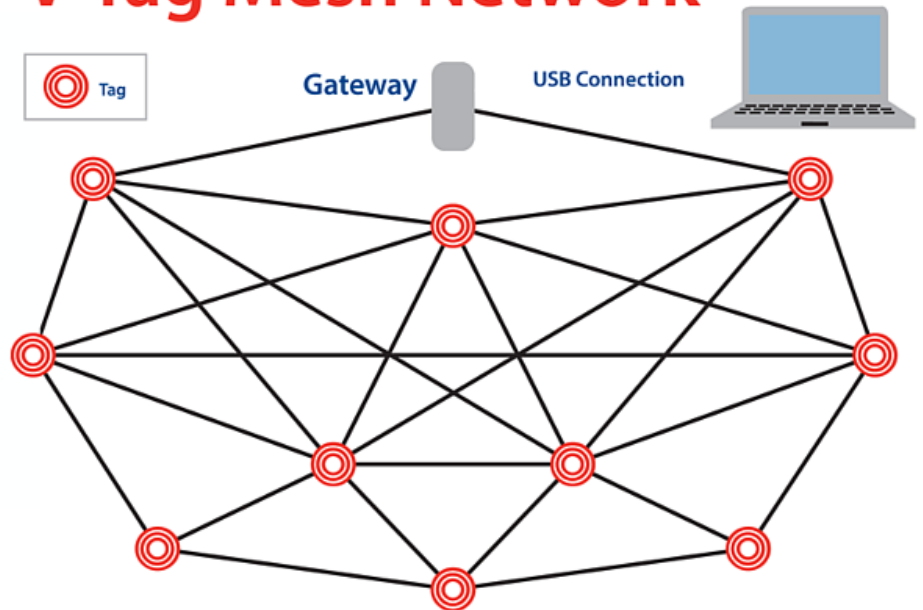
Monitor the status of your assets, too. Set thresholds and receive alarms for changes in temperature, humidity, light, and battery levels, in addition to asset movement. View these alarms on the software map of your facility. Create graphs and reports of movement and view current and past sensor reports.

V-Tags™ with AssetWorx! technology saves time and money on labor during audits—No time is wasted hunting for critical tools and assets. Search for assets in open fields using the V-Tag™ Tracker. Audits are not only easy—They are virtually free of errors. According to Mr. Moe,

“With active tags, there are less misreads and better accuracy.”

The FCC-approved V-Tag™ System, with AssetWorx! software, facilitates WIP (Work-In-Process) tracking for manufacturing and MRO applications. This opens the door to numerous business applications that can benefit from the money-saving advantages of this new technology.

V-Tag Mesh Network





WHICH BUSINESS SECTORS CAN TAKE ADVANTAGE OF CUTTING-EDGE ACTIVE TAG RFID ASSET TRACKING?

Gary Moe initially offered V-Tag™ technology for military, government and aerospace applications. “About a year ago, we decided to really leverage our tracking and systems integration experience to branch out beyond government orders.” He is now offering it across a wide range of industries.

The temperature sensor measuring capabilities cause these active tags to be useful in monitoring pipeline and environmental changes. They are used for tracking in construction, gas, and oil businesses. The medical community uses active tags to locate hospital and lab equipment. They are also applicable for rescue and fire operations, because the tags can be attached to either a fixed or moving object, including people (useful for tracking patient location/status, equipment inventory, etc.).

“Expect to see hybrid systems in the near future that will incorporate bar code, direct part marking, cloud services, and several additional forms of RFID tracking. This total system technology is an example of the complex integration possible utilizing the connected device drivers rooted within the Internet of Things (IoT) movement.” predicts Moe. There is no end to the creative applications for V-Tag™ active RFID technology.

Conclusion: Taking Steps to Begin Saving Money on RFID Asset Location

Start with a needs assessment, and then receive installation and training. The experts at ID Integration provide customized professional services. They work within your budget so that you begin realizing immediate savings in active RFID hardware, software, and labor. Contact ID Integration at (425) 438-2533 for complimentary consultation, and visit their website where you can watch a video of V-Tags™ and AssetWorx! RFID software in action.

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Source Links:

“ID Integration And InfinID Team Up to Provide Low-Cost Location Tracking System”, Scan Data Report, Vol. 38, No. 7, April 17, 2015, Edited by Rick Morgan: <http://www.id-integration.com/rfid-asset-tracking>

“ID Integration, InfinID Offer Active RFID System for Aerospace and Government”, by Claire Swedberg, RFID Journal, April 13, 2015: <http://www.id-integration.com/images/rfid-journal-article-ID-Integration-Offers-Active-RFID.pdf>

ID Integration V-Tag Active RFID Solution Video: <https://www.youtube.com/watch?t=3&v=SMeSMjlrH74>

“RFID Tags: The Future to Cost-Saving Asset Tracking and Asset Location”: <http://www.id-integration.com/rfid-location-tracking>

“Saving Costs With the V-Tag™ Active RFID Solution—No Antennas Necessary!”: <http://www.id-integration.com/v-tag-active-rfid-asset-tracking.htm>

“Transform Your Production Efficiency with V-Tag™ Asset Tracking”: <http://www.id-integration.com/rfid-asset-tracking>