



Touch-Free Transactions and Object-Machine Interaction... An Internet of Things Accelerator, by eChain Technology



Customer Gateway to the Future of Integrated Commerce

No more lost sales due to misplaced items. Stock reordered automatically as soon as it leaves the stock room. Automatic Receiving as items are unloaded from the truck. Real-time inventory visibility in every stock room in the entire hospital system. Automated safeguards to ensure patients are not exposed to expired or non-sterile items. Real-time efficiency tracking, and more.

Business Situation

Humans. Are. Flawed. Items are taken and used in other departments. It's faster in manufacturing to skip QA checks. Items are moved to the wrong locations and lost. Items disappear. We run out of things before we know to reorder. Every business transaction requires that we log into the system, navigate to the screen, and enter all the information, correctly, on every screen.

Solution

- Asset control in the cloud, mobile
- 100% Visibility, all the time
- Extreme range passive RFID
- Multi-language, multiple templates
- User configurable
- Lego architecture, ultimate flexibility

Benefits

- Live in less than a month
- Scalable, a la carte solution
- Open Architecture & Integration
- Anomaly tracking, self-correcting
- Scalable

eChain Technology Simplifies Adoption of the Internet of Things & Total Asset Control: Extreme RFID Now Available to All Companies

"In the mid 2000's, we developed a revolutionary Active-hybrid RFID technology to improve asset management visibility and safety in healthcare. Cost was a huge factor and made this unrealistic for most companies. The evolution of Ultra-High Frequency (UHF) Passive RFID Technologies; the incredible read range and accuracy of the new systems and extremely low cost of tags means we can now track and control everything affordably."

Lewis Kilby, Managing Partner, eChain Technologies

eChain Technology delivers supply-chain and enterprise project execution that improves efficiencies, streamlines the supply-chain, and improves operational performance. We provide full service consulting and application development for supply chain and operational excellence. We have leveraged 25 years' experience building integrated global commerce to develop the eChain RFID Portal, a template-based solution that accelerates adoption of Passive RFID total item visibility, control, and the Internet of Things. eChain Technology is based in Atlanta, GA.

Passive RFID Makes Internet of Things Come to Life

Only a few months ago, UHF systems were thought capable of only reading tags in optimal conditions from 6 to 16 feet (5 meters); not much better than barcodes. We now have systems capable of reading passive tags between 26 and 50 feet. At this range and accuracy, passive technologies have changed the game of asset tracking. We can now track items using \$0.15 passive tags with the same accuracy as active RFID systems using \$50 tags. This breakthrough has made it possible and affordable to track everything.

eChain has developed the revolutionary RFID Portal to allow our customers to rapidly adopt this exciting technology. The RFID Portal is cloud-based and extremely fast. It is template-based and can be configured for a new customer/scenario in days. The screens are responsive and adjust depending on whether viewed with PC, iPad/Tablet or Phone. We offer an affordable, yet secure shared environment, or will deploy a dedicated solution as required.

Key Features

- Extreme Passive RFID
- Read up to 1,000 tags/second/antenna
- Expert setup, install and tuning
- EPC Gen-2 Standard, supported worldwide
- Hundreds of over-the-counter tag options
- Asset Management in the Cloud
- Responsive UI for tablet
- Mobile App with barcode/RF scan
- Multi-Language
- Multiple Templates
- Asset master uploads/downloads
- Anomaly Tracking
- Kit (grouped item) tracking
- Associate people/items/locations
- Workflow triggered updates and alerts
- Expired and Short-Life item management
- Uses LAMP Stack for scalability
- ERP Integration
- Shipping Integration
- Shared or Dedicated option
- Simple Pricing Model

For More Information

For more information about this Solution, call eChain Technology Sales Information Center at 800-665-3176

Online, go to:

www.echaintechnology.com

email: strategist@echaintechnology.com

To access the eChain Technology RFID Portal directly, go to: www.echainrfid.com



Situation

"People have limited time, attention and accuracy – all of which means they are not very good at capturing data about things in the real world. If we had computers that knew everything there was to know about things – using data they gathered without any help from us – we would be able to track and count everything and greatly reduce waste, loss and cost. We would know when things needed replacing, repairing or recalling and whether they were fresh or past their best." Kevin Ashton, Auto-ID Center at MIT

In healthcare, dirty equipment may be reused. Expired items are used and sold every day. Inventory runs out before being reordered, critical items are "borrowed" without notice. People will naturally seek out the easiest and quickest path allowed by business processes.

Solution

We provide a full-service RFID solution customized to your needs and integrated with your legacy apps that is quickly implemented, reduces costs/loss, increases safety and quality, and reduces overhead.

Every step, every item movement is tracked and checked against approved workflows. Any variance is immediately flagged and an alert is generated.

Our UHF solution has the capability to perform at ranges only seen using expensive Active RFID in the past. It is now possible to affordably tag every item that you want to track: equipment, inventory and people. Technology and advanced algorithms provide up to 100% visibility of your assets. We have developed cloud-based and mobile applications that auto-configure to work on desktops, laptops and mobile devices.

Out of the box, we provide capabilities that the competition does not: multi-language, user configuration, asset upload/download, advanced rules & analytics capabilities. Additional add-on modules available.

Software

- Responsive CMS UI (Cloud)
- MySQL 5.5
- PHP 5.5
- Linux Ubuntu
- Plug-in Modules

Benefits

Live in Less Than One Month

Our template approach allows us to quickly set up new customers, business rules and requirements. Upload asset tables. Our RFID experts will ensure the hardware is properly installed and tuned as the system goes live.

Scalable, a la carte Solution

The eChain Portal supports basic asset management, anomaly management and rules execution out of the box. We have additional services provided as add-on capabilities: legacy system integration, shipping integration, advanced BI dashboard, advanced inventory management, additional languages, more...

Open Architecture & Integration

eChain RFID Portal was designed to be highly modular and easily configured. We have taken a revolutionary approach to use a Content Management System (CMS) instead of hard-coding a static app. Our approach makes our system infinitely flexible and scalable. We have standardized on Linux, Apache, MySQL, PHP (LAMP) solution stack.

Anomaly Tracking, Self-Correcting

We are experts in RFID and advanced technologies and we understand the limits of the physics of RFID. We have developed our system to auto-identify potential problems, and our experts are constantly monitoring for anomalies. We offer ongoing correction support for our clients.

Scalable

eChain Portal is scalable to your specific needs, flexibly ranging from specific process management on a department level to a full-scale, multi-site installation. The LAMP solution stack is open-source suitable for building high-availability heavy-duty dynamic web sites and capable of serving tens of thousands of requests simultaneously.

Our business model supports incrementally growing your RFID solution across other parts of your business affordably as you realize benefits from initial pilots or trials.

Technologies

- SSD Hosted Servers
- Intel NUC RFID Controller
- UHF Gen2 Multi-Port Reader/Writer
- Sm Antenna, 100deg, 5.5 dBic 5x5"
- Md Antenna, 70deg, 9 dBic 10x10"