SOLUTION BRIEF

TAG YOUR IT: CONVERGING ELECTRONIC SHELF LABELS WITH ARUBA’S SECURE WIRELESS PLATFORM

NETWORK AS AN IOT PLATFORM

Real-time store IoT platforms feed analytics engines using data from inventory, footfall, CRM, point of sale, locationing systems, and other sources. This information is used to increase basket size, reduce abandonment, improve efficiency, deliver relevant real-time advertising and recommendations, and enhance margins. The result is an “intelligent store” that is contextually adaptive to the needs of the retailer and the identity, behavior, and location of the shopper.

Electronic shelf labels (ESLs) are a fundamental building block of the intelligent store. ESLs consist of a wireless transceiver, on-board processor, personal area network (such as an NFC), and LCD, TFT, or E-paper display. They connect wirelessly to in-store or cloud price management software, and can be used for dynamic pricing, stock and inventory management, point-of-product payment, locationing, footfall monitoring, customer identification, and targeted marketing.

ESLs are considered mission-critical devices that must work reliably at all times because they directly impact revenue, margins, and customer experiences. Regulations regarding pricing accuracy dictate real-time interaction between the tag pricing system and the point of sale systems. And targeted marketing programs only work if they can be reliably delivered in real time. ESLs would be prohibitively expensive if they had to be hardwired because of the initial cost of pulling cables, and typical store churn would require continuous adds, moves, and changes. As a result, ESLs are wireless, and this raises the performance bar for a store’s wireless network.

Next-generation Wi-Fi deployments increasingly converge front- and back-of-store connectivity needs with high speed wireless internet access. With their built-in IoT radios, and support for external USB adapters, Aruba access points have become centralized platforms for a broad range of IoT devices, such as ESL, lighting, refrigeration monitoring, air quality sensing, asset tag, and security systems.

WHY SES IMAGOTAG AND ARUBA

• Enhances both the shopping experience and store operations
• Enterprise-grade building IoT connectivity and security
• Eliminates the cost of purchasing, deploying, and maintaining RF gateways
• Easily retrofits to existing Aruba 802.11ac deployments
• Secure tunneling protects tag and management communications
• Simple set-up and adds/moves/changes
• Certified interoperability across the product portfolios

ACCESS POINT AS COMMUNICATION PLATFORM

ses imagotag, one of the world’s largest electronic shelf label providers, and Aruba have partnered to ensure that ESLs can be economically, reliably, and securely deployed over a retailer’s network in applications spanning from convenience stores to hypermarkets to big box retailers.
Aruba’s networks have been field-proven in the most demanding retail deployments, and deliver the robustness and reliability needed for business-critical ESL, data, locationing, voice, video, and IoT services. Network security is best-in-class and PCI compliant.

The joint solution uses Aruba access points already deployed in the store or mall. Access points secure communications between the ESLs and the back office applications. A low-cost ses imagotag USB transceiver inserted into the access point’s USB port handles all ESL communications.

Access points establish secure tunnels to ses imagotag’s Jeegy® software, or alternate ESL software fit for the purpose Dynamic IoT traffic segmentation is maintained throughout the Aruba switching infrastructure, protecting the tags against attack, and the rest of the network against compromised devices.

Aruba switches automatically set-up secure connections with access points without VLANs and regardless of the switch port into which they’re connected. This feature simplifies the initial deployment, and minimizes opportunities for miswiring during adds, moves, and changes over the life of the deployment.

**UNIQUE VALUE PROPOSITIONS**

Once deployed, the Aruba and ses imagotag system shelf labels can be remotely updated, and to communicate in real-time with pricing, CRM, marketing, and loyalty applications, without physically accessing the labels. Key benefits include:

- Pricing automation allows updates in seconds instead of days
- Interactive real-time connection with shoppers allows highly relevant targeted messaging and new services such as scan-and-pay at the shelf
- Instantly identify out-of-date inventory to improve staff efficiency and regulatory compliance
- End-to-end security over a PCI-compliant network

Figure 1: Representative ses imagotag/Aruba Joint Solution
CERTIFIED INTEROPERABILITY
We’ve taken the guesswork out of retail deployments by certifying the interoperability of SES-Imagotag ESLs with Aruba infrastructure. Set-up is also a breeze. Just select “SES-Imagotag” from a drop-down menu on the access point configuration page, select the IP address of the back office software, and you’re done. Joint deployments go in faster and are easier to maintain.

SUMMARY
Aruba’s secure platform is the ideal way to support electronic shelf labels, and deliver the benefits of an intelligent store, in retail applications of any size. Contact your local sales representative to see how together Aruba and SES-Imagotag deliver the most cost-effective, centrally managed ESL solutions in the industry.