Aruba Networks and Ekahau

Deliver accurate location tracking over your 802.11 network without new wiring or proprietary readers

In today's environment, it is essential that organizations get accurate location information to the right person at the right time. The Ekahau Real-Time Location System locates high-value assets and people over Wi-Fi networks, leveraging Aruba's secure Wi-Fi infrastructure. The solution leverages new or existing wireless networks, enabling businesses to keep track of valuable assets and personnel, improve security, and enhance workflow — without the need for proprietary infrastructure. By using Aruba's 802.11 access points in combination with Ekahau RTLS, the Wi-Fi network can now serve as the backbone network for a precise real-time location system.

The combination of Aruba Networks and Ekahau products provides unmatched accuracy through advanced algorithms that can accommodate environmental changes as well as damaged APs. Ekahau's Wi-Fi tags, which can be configured remotely, feature full two-way communication, as well as intelligent motion sensors, user-configurable push buttons and a long battery life. The solution has extremely low network overhead, enabling a large number of tags to run on an existing Aruba WLAN without impact, while a single server can track 20,000 mobile devices and produce 600 locations per second. State-of-the-art deployment tools ensure that the solution can be quickly rolled out and easily serviced without any additional infrastructure costs. The Ekahau/Aruba RTLS solution provides a means for locating assets quickly and accurately while enhancing workforce productivity and security.

Why Aruba & Ekahau

- The unique Ekahau–Aruba Blink Mode, optimized for use with Aruba ARM, enables higher location accuracy and provides 5x battery life
- Ekahau RTLS is optimized for Aruba light-weight access points, resulting in easier deployment and maintenance
- Ekahau Positioning Engine software is all that is required to enable Aruba's WLAN infrastructure to serve as an RTLS system
- With the complete Aruba-Ekahau solution, no additional infrastructure hardware is required to achieve high location accuracy
- Two-way communicating tags provide flexibility and enables unique applications
- No separate RTLS calibration needed, as the Wi-Fi site survey automatically calibrates RTLS
The Aruba-Ekahau solution allows quick and accurate locating of assets and people, which optimizes use of the device and lowers the staff time spent searching for it. The low lag time ensures security and safety with virtually up-to-the-minute tracking, while processes can be visualized and optimized.

Ekahau RTLS Components

For a full list of solution components, visit the Ekahau website at http://www.ekahau.com.

Ekahau Positioning Engine (EPE): EPE calculates the locations of the tracked devices, and provides location data to Ekahau applications, or to third party applications via XML/HTTP API. EPE enables easy monitoring and management of tracked devices and the RTLS system. EPE runs as a service on customer provided Microsoft Windows (XP, 2003) server.

Ekahau Vision Asset Visibility Application: Ekahau Vision provides real-time enterprise visibility of asset movements, and also provides informative and comprehensive reports. With Vision, you can easily find assets and asset groups, track asset history, and create event rules, such as:

- Alarm if patient “Williams” enters “Operating Room B”
- Send popup message with voice alarm to nursing station displays
- Send e-mail to head nurse cell phone if a used IV pump is re-entering a clean room
- Alarm if temperature drops below a threshold

Ekahau T301a Asset Tag: The T301a asset tracking tag offers long battery life, audible alert, two LEDs, motion detection, two way communication, two user configurable buttons, and supports several mounting options. An industrially safe model is also available for process industry use.

Ekahau T301b Personnel Tracking Tag: The T301b is a credit-card size personnel tag. It’s rechargeable, has an OLED display and supports RTLS with 2-way communication capabilities (send and receive text messages, send and acknowledge alerts)

Ekahau T301i Industrial Tag: The T301-i is a two-way call button that is used in manufacturing environments to replace wired call buttons. The wireless communication allows flexible placement of the call button, and the two-way communication ensures the data gets delivered, despite the wireless conditions.

Ekahau Site Survey (ESS): ESS is not only the industry-leading Wi-Fi planning/survey/troubleshooting tool. ESS also enables quick and easy deployment, verification, and management of RTLS. As the site survey data also calibrates the RTLS system, there is no separate RTLS calibration required. With ESS, unlike any other tool, a single site survey is enough to verify your network as well as calibrate the RTLS.