# s o LUTION BRIEF Indoor Location Tracking over Ruckus Wi-Fi



# Ekahau RTLS

Real time location tracking systems (RTLS) provide critical insight to manage assets, improve utilization rates, streamline workflow and enhance safety. They provide an essential capability for a range of industries, including health care, retail, logistics and manufacturing as well as government and education. Ekahau provides the easiest, most cost effective and accurate positioning solutions for locating people and assets, as well as monitoring temperature and humidity, using wireless enterprise networks.

Ekahau's Real Time Location System (RTLS) operating over Ruckus WLAN infrastructure is a powerful tool to improve asset utilization, enhance quality and reduce costs.

### The Ekahau Solution

The Ekahau RTLS system consists of:

- Ekahau Vision: end user application with maps, reports, and alerts
- Ekahau RTLS Controller (ERC): the brains of the system
- Ekahau Wi-Fi tags that are attached to assets and carried by people

Ekahau RTLS is the only solution on the market that can provide accurate location tracking over Wi-Fi networks without the need to add complex and expensive exciters or other additional infrastructure.

In addition to tracking and managing Wi-Fi tags, Ekahau RTLS can track and manage other 802.11 enabled devices such as smartphones, tablets, laptops, and a large variety of other devices. Ekahau RTLS also integrates barcodes and passive RFID to provide its customers comprehensive visibility into the objects within their enterprise that they want to track and manage.

### **Comprehensive Solution**

RTLS performance and reliability are greatly improved by running over Ruckus's patented technology that optimizes wireless coverage via:

- Smart antenna arrays
- Best path selection algorithms
- Advanced quality of service engine
- Smart mesh RF routing
- Centralized Wi-Fi management

Ruckus WLAN adapts to real-time changes in environmental conditions to constantly optimize range and capacity. It extends signal range (Wi-Fi coverage) 2 to 4 times with fewer APs and radically simplifies deployment and administration. More stable signal measurements translate to higher location accuracy, and better range translates to more reliable transmission of tag messages, such as staff safety alarms and nurse calls.

## **Vertical Market Solutions**

Since launching the world's first commercial Wi-Fi based location engine in 2002, Ekahau has continued to innovate and now offers comprehensive solutions for a variety of applications across several vertical markets.

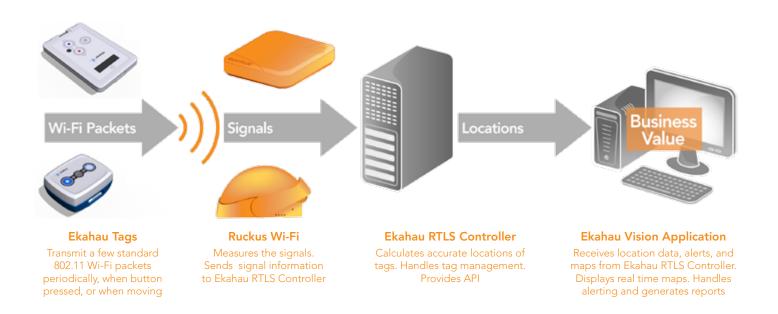
### Healthcare

Ekahau RTLS gives the visibility to properly manage processes and assets, ensuring appropriate equipment is available when needed, while also reducing capital costs via improved asset utilization.

In addition to driving improved patient care metrics, Ekahau RTLS improves staff safety by providing a wireless, location-aware alerting solution. It can also keep track of patients and enables wireless nurse call, reducing the risks of injury or death.



# Indoor Location Tracking over Ruckus Wi-Fi



Ekahau wireless temperature monitoring and management ensures cold storage facilities maintain compliance with safe temperature ranges with temperature monitoring, reporting and alerting.

### Retail

# Gain visibility into store operations and traffic flow like never before

Using a Ruckus Wi-Fi network, Ekahau RTLS automatically locates every asset, including key staff members, in and around your stores, providing improved product positioning, reduced asset and product losses and higher customer satisfaction. You can measure movement and dwell times at service counters and special product displays as well as decrease theft and loss of critical store assets. Ekahau's temperature and telemetry solutions allow you to manage your cold chain wirelessly and to manage and maintain other critical store infrastructure wirelessly.

### Mining and Process Industries

## Monitor control, sensor and alarm systems to keep processes running smoothly and safely

Capital intensive industries like mining and refining depend on smooth operations. Managing assets and staff can have multi-million dollar productivity impacts, especially during outages. Improved monitoring and safety systems can help reduce accidents and minimize the impact when they do occur.

Ruckus<sup>®</sup>

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