Ekahau Positioning Engine 3.1

Benefits

- Requires no proprietary hardware, works over standard Wi-Fi network
- Tracks PDAs, laptops and Wi-Fi tags real-time
- Provides ubiquitous positioning indoors and outdoors
- Solves expensive logistical problems by instantly locating assets and people
- Generates real-time inventory location information of all tagged assets
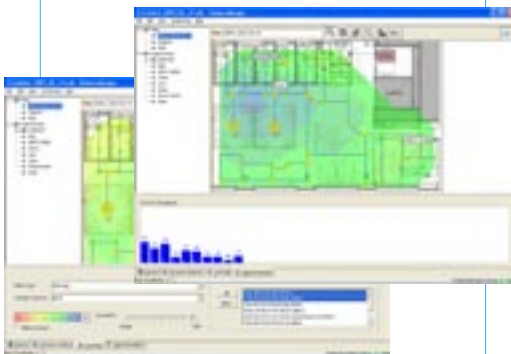

Location-enabling your network

Combining the latest 802.11 wireless networking technology with location information from Ekahau Positioning Engine 3.1 (EPE) enables a variety of applications that streamline processes, improve safety and generate savings. Vertical industries such as healthcare, manufacturing and industrial plants are able to benefit from tracking patients, staff, assets and inventory.
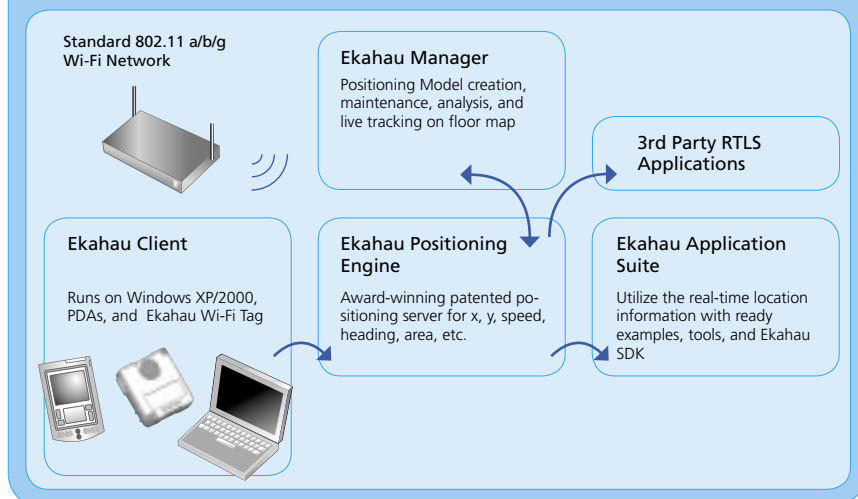
Ekahau T201 Wi-Fi Location Tag

EPE can accurately locate and track in real-time any person carrying a Wi-Fi enabled PDA or laptop. For locating assets and people that do not carry mobile computers Ekahau provides T201 Wi-Fi location tracking tags. The T201 tag is a small active radio tag that is easily placed in a pocket, clipped to a belt or attached to an asset. The battery-powered T201 can be rapidly recharged using a single charger or the Ekahau C201 rack charger which is able to charge 20 tags simultaneously.

Fully Software Based

The positioning capability of EPE is based on Ekahau's patented technology using site calibration and statistical modelling of signal strenghts. This technology provides the highest possible accuracy of up to 3.5 ft (1m), while being the most cost effective to implement. In addition to using standard 802.11 infrastructure, EPE requires no proprietary hardware, as the technology is fully software based. This software based solution ensures fast implementation with the best possible cost-efficiencies and ROI.

Ekahau Positioning Engine Software Concept

Standard 802.11 a/b/g Wi-Fi Network

Ekahau Manager
Positioning Model creation, maintenance, analysis, and live tracking on floor map

3rd Party RTLS Applications

Ekahau Client
Runs on Windows XP/2000, PDAs, and Ekahau Wi-Fi Tag

Ekahau Positioning Engine
Award-winning patented positioning server for x, y, speed, heading, area, etc.

Ekahau Application Suite
Utilize the real-time location information with ready examples, tools, and Ekahau SDK

Ekahau RTLS

Ekahau RTLS (Real Time Location System) is an end-to-end solution for real-time tracking. The Ekahau RTLS consists of Ekahau Client software agents and Ekahau tags that run on the tracked devices, Ekahau Positioning Engine that calculates location estimates, Ekahau Manager for system management, and the optional Ekahau Applications suite of tools for end-users accessing the location information. For integrating with 3rd party applications and systems, an Ekahau SDK is provided.

Features:

- Up to 3.5 ft (1 m) accuracy
- Symmetric multi-threading provides scalability to campus-wide installations
- Location information includes x, y, floor, speed, heading, logical area(s), and expected positioning error
- Quick application integration via Java SDK (Software Development Kit) or YAX™ protocol
- Supports multiple positioning sites, floors, and maps
- Ekahau Rail Tracking™ further increases accuracy and stability
- Supports all standard 802.11a/b/g Wi-Fi access points
- Quick installation and setup for fast rollouts, reduced installation costs, and virtually no disruptions to current Wi-Fi operations.

System Requirements:

- Floor map image of the area (JPG, PNG or BMP format)
- Positioning Engine: At least 1 GHz x86 CPU, 256 MB of RAM, 200 MB of HD, Windows® XP, 2000, 2003 Server and Linux
- Tracked devices: Ekahau T201 Tag, PocketPC 2003, PocketPC 2002, WinCE 3.0, Windows XP, and Windows 2000 devices
- Client software supports Wi-Fi interfaces that are based on Agere, Atheros, Broadcom, Texas Instruments or Conexant chip sets. For detailed listing see www.ekahau.com/devices/
- Wireless network: Standard 802.11 a/b/g Wi-Fi network

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